Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—In the latter part of Monday's lecture I was endeavouring to show that there are forms of carotid aneurism curable by pressure, and I was adducing examples of diseases so diagnosed which had been brought to a successful issue by means both of digital and instrumental pressure. I now resume this subject. I have tried to show, by the three examples on the diagram board before you, what are the main anatomical features of carotid aneurisms appropriate for the treatment by proximal pressure (College museum, 1685), by distal pressure or ligature (Scarpa's preparation in an earlier stage), and by the Hunterian ligature (the large tumour from St. George's Hospital growing from the upper end of the carotid).

The more of healthy artery there is accessible below the tumour, the smaller the latter is, the slower its growth is, and the more clot it contains, obviously the better adapted must it be for the compression treatment. But the histories of the cases hitherto known will prove that this treatment is not limited in its application only to these simpler forms of the disease. This proposition is proved by the cases recorded of successful pressure under the care of Sheppard of Worcester* and Kerr of Canton,† as well as those of Rouge and Humphry referred to in the last lecture.

Another case, which excited much interest here at the time of its occurrence, is the following, for the notes of which I am indebted to Mr. Gay, who was originally consulted in it, and to Mr. Coles, who superintended the application of the pressure. The patient was a City merchant, who had been in a railway carriage which ran up an embankment. He and two other occupants of the carriage scrambled very hastily out of the window, head foremost. He did not perceive that he had sustained any injury beyond a shaking. About a fortnight afterwards, while shaving, he perceived a pulsating tumour at the root of the neck on the left side. It was about as large as a walnut, and was accompanied with aneurismal pulsation and an unusual bruit described as being of a whistling kind. It was situated on the carotid artery, a little above the bifurcation of the innominate; but there was room to push the thumb or the pad of an instrument down behind the sterno-clavicular joint and stop the pulsation, nor did this give him any peculiar inconvenience. The diagnosis was made by Mr. Coulson and Mr. Gay, who first saw the case, and was subsequently confirmed by Mr. Buxton Shillitoe, Sir J. Paget, Sir W. Fergusson, and Mr. Prescott Hewett, who were called in consultation. There can therefore be no reasonable doubt of the aneurismal nature of the tumour. Pressure was decided on, and was at first applied by means of a frame, to which was attached an arm, movable in every direction by rack and pinion joints, and carrying a small pad. This was tried for four days and nights, and the proper application of the pad stopped the pulsation; but it was thought that the instrument was liable to become displaced by the movements of the patient's body, and accordingly, at a consultation between Mr. Gay and Sir J. Paget, it was decided to resort to digital pressure. In this the services of my friend Mr. Coles were employed, and the treatment was commenced on June 4th, 1867, rather more than a month after the first discovery of the aneurism. Relays of students were obtained to keep up pressure night and day; the patient was placed on an Earle's bedstead, and digital pressure was commenced about 6 P.M. He bore it with much fortitude, and it was kept up pretty continuously till the evening of June 7th—i. e., for four days and three nights—the patient sleeping at intervals. The excoriation of the skin and its extreme tenderness now compelled the discontinuance of the pressure. It was resumed at 10 A.M. on June 10th, but after six hours the tenderness of the skin again compelled its discontinuance. In the interval the acetate of lead had been given in two-grain doses three times a day. The effect of the pressure had been to abolish the bruit in the tumour, but this returned on June 14th. The skin, however, being still too tender to bear pressure, the acetate of lead was continued until June 24th, when digital pressure was resumed. In the interval a consultation had been held at which the tumour had been somewhat roughly manipulated, but without any methodical attempt to effect the dislodgement of any clot, and with no symptoms of embolism following. On the day above-named (June 24th) digital pressure was resumed, as before, at 10 A.M., and was kept up till June 27th—i. e., a little over three days, when it was discontinued finally. It was not, however, until a month from this time—viz., July 27th—that the pulsation in the sac disappeared, and the reduction in the size of the tumour enabled him to button his shirt-collar. From this time the tumour gradually diminished, and in about two months had quite disappeared. He was examined by Mr. Gay last March, and was found in perfect health, with no trace of aneurism whatever, and the carotid conveyed blood and appeared to be of the same calibre as the artery of the opposite side.

Two views may, I think, be taken of this case—namely, (1) that it was a small sacculated aneurism, and that the application of the pressure produced a certain amount of deposit of soft clot in the sac, which afterwards went on to complete obliteration under the influence of rest and appropriate regimen, aided, very possibly, by the administration of the acetate of lead; or (2) that the artery was merely dilated, as we so often see in the right carotid near its root, and that the pressure, by temporarily relieving the dilated coats of the artery from the force of the circulation, enabled them to contract again. It would be rash, and even absurd, to dogmatise about a case which one did not see; and the latter view appears probable to Mr. Gay, who was in attendance on it. But I may perhaps be allowed to observe that such aneurismal dilatations are not usually accompanied by anything like a distinct bruit, nor are they known to be susceptible of cure by any method; while the gradual disappearance of pulsation after a vigorous application of total compression, and the subsidence of the tumour in a longer or shorter space of time, is exactly what has been noticed in other cases of cure of aneurism by rapid pressure, as in Dr. Murray's and Mr. Durham's cases of abdominal aneurism. In the latter it was more than a month after the discontinuance of pressure before the pulsation finally ceased. In those cases there could be little doubt that the effect of pressure had been to allow the sac to contract on its contents and to produce a deposit of soft clot in the sac, and that this gradually hardened and increased until it filled the sac, or that by some lucky accidental displacement of a portion of it the mouth of the sac became obstructed, and the cure was thus produced. Whatever view we take of the case just related, it must possess very great value as showing the possibility of curing by milder means the very class of cases for which Wardrop performed and recommended Brasdor's operation. It would have been very interesting in this gentleman's case to have noted the effect of distal pressure, but, as far as I have been able to ascertain, this was not done.

I have met with no case on record, nor heard of any in private, where the rapid method of pressure has been used in carotid aneurism; yet I can easily imagine circumstances in which it might be advisable: where the patient cannot tolerate the pressure without chloroform, yet the aneurism is of no large size and appears to contain some clot. The rapid cure of many cases of small aneurisms under pressure when clot has previously been deposited appears to prove that, in our Hunterian preparation (1685), a cure might have been attained in a very few hours.

But the tendency to affection of the brain from compression of the carotid must enforce great caution in watching the symptoms while the patient is narcotised. A case is recorded by Mr. Cooper Forster in Guy's Hospital Reports (1873, p. 63) where the patient died with hemiplegia and

* Med. Times and Gaz., vol. ii. 1863, p. 642.
† Amer. Journ. of Med. Sci., April, 1867, p. 332.

certain singular morbid appearances in the brain, as the direct consequence of the prolonged application of distal pressure to the carotid, in a case of innominate aneurism, which will, no doubt, serve to enforce much circumspection in any future attempt to cure carotid aneurism by the rapid method of pressure; though the attempt is worth making, and in appropriate circumstances should be made. I mean by "appropriate circumstances," where the aneurism is of such a nature and size as to render the cure by compression probable, but, after a persevering trial, compression without chloroform cannot be tolerated.

To sum up our present experience (as far as I have discovered it) of this matter. I have mentioned five successful cases—viz., Sheppard's, Rouge's, Kerr's, Prof. Humphry's, and Mr. Gay's. In all these, except Prof. Humphry's, the pressure was digital. The only two other cases with which I am acquainted were unsuccessful. One by De Castro,* where the aneurism affected apparently the external carotid. Digital pressure was tried in vain. Ligature of the common carotid was also unsuccessful. The aneurism was laid open and the external carotid tied, but death followed on the forty-third day. The other case is recorded by Delore.† The aneurism was the size of an orange, and affected the common carotid in the middle of the neck. Digital pressure was tried for six hours at a time on two consecutive days, and was then given up on account of pain. The lower part of the carotid was tied, but the patient died from the bursting of the aneurism into the pharynx. Thus out of seven cases of compression, five succeeded; and in the two which failed the ligature failed also.

The treatment of carotid aneurism by ligature of the artery was first attempted by Sir Astley Cooper in the well-known case which forms the commencement of that great treasury of medical and surgical experience, the Medico-Chirurgical Transactions. The operation was performed in the year 1805. It proved fatal from inflammation of the sac of the aneurism. The preparation was removed and dissected with Sir Astley's usual diligent care. It is well figured in the first volume of the Medico-Chirurgical Transactions, and I am able by the courtesy of the authorities of St. Thomas's Hospital to exhibit it to you. It is interesting in itself as one of the landmarks in the progress of surgery, and it shows perfectly the mechanism and effects of one of the usual causes of death after the ligature of the carotid below an aneurismal tumour—viz., the inflammation of the sac and of the cellular tissue around it. It is well known that this danger attaches more to the operation when performed after the method of Anel—i. e., when the artery is tied close to the tumour—than to the Hunterian operation; as, for instance, the ligature of the femoral for popliteal aneurism, where a considerable distance separates the ligature from the tumour. This inflammation is usually regarded as due to the deposit of soft clots in the sac, as a consequence of the want of any circulation through it—a point on which Broca has laid much stress, and to which he devotes a great deal of his space. But it seems to me equally probable that the proximity of the wound to the tissue of the sac is the real cause of the frequency of its inflammation. This point is not entirely overlooked by Broca; but he passes it over with a very few words. It forms, to my mind, one of the great objections to the ligature of the carotid for aneurism of the artery itself, that in a tumour which is at all large no space exists to cut down upon the vessel without great disturbance of the cellular connexions of the aneurismal sac, and much danger of subsequent inflammation.

Sir Astley Cooper's preparation exhibits to us all the danger of such inflammation, even when it has not advanced to the stage of rupture. The inflamed and enlarged tumour has pressed on the pharynx to such an extent that it only just admitted a common bougie, and on the larynx so as almost to close the glottis, and has produced inflammation of the windpipe, with deposit of coagulating lymph on its mucous surface. The artery in this case was firmly sealed by clot above and below the ligature. The condition of the coagulum in the sac when fresh is not precisely described in Sir Astley's account of the case; but in the preparation it appears firm enough, and there is little reason for attributing the extensive inflammation which succeeded the operation to any irritating action of the clot, when so palpable and undeniably sufficient a cause exists in the dissection which had been carried on in the immediate neighbourhood of the sac, and in the complications incident to suppurating wounds. In fact, why should soft clots of blood exercise any irritating effect on the tissue of the sac? We see them constantly in all parts of the body, remaining perfectly quiet—"passive," in a different sense from Broca's—for long periods of time, and then quietly disappearing. We see aneurismal sacs, when submitted to pressure, remaining soft, semi-fluctuating, with hardly any pulsation, then gradually becoming hard and pulseless, and finally rapidly shrinking. Can there be any doubt that in these cases a great part of the sac has first been filled with soft clot, which has gradually given place to laminated fibrine? Broca and many other authors have, no doubt, quoted instances of aneurism which have proved fatal by inflammation, and such inflamed aneurisms have been found more or less occupied by soft clot. We must all of us have seen instances of this event, which is by no means rare in voluminous aneurisms in any part, and especially in the thorax. But the connexion of cause and effect is less obvious. In watching such cases (one of which occurred in my own practice a very short time since) it has appeared to me that the inflammation has been provoked by accidental causes acting on tissues highly irritable from the pressure of the growing sac; that the pulsation did not begin to slacken till the inflammation had manifestly commenced; in a word, that the coagula were produced by the inflammation instead of the reverse. The neck is a part in which inflammation of the cellular tissue is apt to spread rapidly, and to cause great infiltration, so that this traumatic cellulitis after ligature of the carotid soon produces fatal pressure on the parts around.

Whether on this point I am right or not, the fact remains that the ligature of the carotid near the aneurismal sac is very often followed by inflammation of the latter—a point which is illustrated by many well-known cases, amongst which I may refer to Mr. Vincent's related in vol. x. of the Medico-Chirurgical Transactions, of which I have here the preparation from the museum of St. Bartholomew's Hospital. In this instance, as in so many others, pulsation persisted for some time after the ligature. The inflammation commenced unmistakably in the wound, and Mr. Vincent says explicitly that "the aneurismal sac was contracted around a firm coagulum, and that its internal surface bore no indication of having been inflamed."

This first case of Sir A. Cooper was therefore unsuccessful; but the same volume contains his second and successful case. This was the first instance of a completely successful result in carotid aneurism; for, though a Swedish surgeon tied the carotid in 1807 (i. e., between Sir Astley's two cases, which occurred in 1805 and 1808 respectively) for a pulsating tumour behind the ear, the nature of the tumour seems uncertain, and it recurred fifteen years afterwards.

In the case before us the aneurism was believed to affect the internal, not the common carotid; and it is remarkable that the ligature did not entirely abolish the pulsation of the tumour, though the artery was tied with two threads and divided between them. The man survived the operation thirteen years and died of apoplexy. The dissection of the parts, after injection, is recorded in the first volume of Guy's Hospital Reports; and I am enabled to show you this interesting preparation also from the museum of St. Thomas's Hospital. The interest, however, of the preparation itself is chiefly historical. In an anatomical point of view, it has been spoilt by the failure of the injection. All that we can say is that the appearance of the parts is consistent with the opinion entertained by Sir A. Cooper, that the aneurism was situated above the bifurcation of the carotid, and that the internal carotid was the artery affected. Two other cases of ligature of the common for aneurism of the internal carotid are recorded by Mr. Porter ("On Aneurism," p. 151) and by Mr. Syme (*Lond. and Edin. Monthly Journ.*, Nov. 1842), and may be compared with this.

The records of the Hunterian operation for carotid aneurism are to be found mainly in the works of Dr. Pilz* and M. Léon Lefort,† which embrace and continue those of previous investigators, such as Norris, Norman Chevers, Woodd, and others. The former collection contains 87

* Gurlt: Jahrb., 1863-5, p. 180. † Gaz. des Hôp., 1860, p. 461.

* Lang. Archiv, vol. ix. † Gaz. Hebd., 1868

cases, of which 31 died and one was unaccounted for. I do not think these statistical details are of much value in deciding points of practice; but I merely call attention to this fact, which agrees in general with the results of other less extensive inquiries, in order to show that the operation is by no means so free from danger when used for aneurism as has been represented. The danger does not depend, I dare say, exclusively on the operation—perhaps not principally upon it,—but on the condition of the aneurismal artery, and very probably on the condition of brain which often accompanies carotid aneurism, and is revealed by the cerebral symptoms so frequently present. At least, it is remarkable that the operation has only been once followed by death out of thirty-four times in which it has been known to have been practised for epilepsy, headache, and other nervous symptoms, in which, in all probability, the artery was healthy and the nutrition of the brain not seriously impaired.

M. Lefort's paper does not contain the references nor the details of the cases on which his conclusions are founded; but it appears to be the result of conscientious inquiry into the subject, and its object is somewhat more critical than that of the German surgeon's paper. He says that, excluding all errors of diagnosis and cases imperfectly reported, the number left in which the notes were sufficiently accurate to enable a judgment to be formed as to the precise situation of the aneurism was 53; 35 of these being of the common carotid, 6 of the internal, and 12 of the external carotid and its branches. And he says that, out of these 35 cases of aneurism of the common carotid, less than half have been really successful; for that 17 died, and in 1 the aneurism recurred. M. Lefort also calls attention to the great frequency of suppuration of the sac after the ligature. This occurred 8 times, and in 3 was the cause of fatal hæmorrhage. M. Lefort, in fact, can find only 16 cases of recovery after this operation (having left one case unaccounted for); and in exactly half of these cases there were complications which placed the patient's life in much jeopardy—threatened paralysis, hæmorrhage, suppuration, &c. Pilz's list appears to give 50 cases of aneurism of the common carotid (or rather, perhaps, 50 cases in which nothing is said to show that the aneurism was not situated above the bifurcation), with 17 deaths and 2 recurrences. In our list of hospital cases, 5 out of 9 proved fatal.

If this is a true picture (and I see no reason to doubt it) of the experience of surgeons hitherto of the Hunterian operation for aneurism of the common carotid, what is the inference? M. Lefort says that we cannot avoid those dangers which depend on the obliteration of the artery, since this is necessary for the cure of the aneurism; but that the dangers which depend on the suppuration of the sac we can obviate by resorting to the old operation—i. e., after having secured the artery on the proximal side of the sac, incising the tumour, turning out the clot, and tying its distal end; and he refers in general terms to a "surgeon of Leeds" who adopted this course, but with what success does not appear.

It is clear, however, from the notes of several of the cases which I have just referred to, and others which I shall have to mention hereafter, that the cure by compression does not in the least degree necessitate the obliteration of the artery; and I should hope that, looking to the relatively large number of cases in which the use of compression in some form or other has succeeded, and particularly to the proved possibility of accustoming patients to its use in spite of a good deal of distress at first, surgeons will adopt this plan of treatment more generally, and pursue it more patiently.

The facts which I have hitherto brought before you, taken from published sources, which cannot be supposed to give too unfavourable a view of any operation, sufficiently prove how great is the danger incurred in tying the common carotid artery on Hunter's (or rather Anel's) method for an aneurism involving the trunk of that vessel. This danger, of course, increases as the tumour is seated lower on the artery, both in consequence of the greater difficulty of the operation and the proximity of the sac to the ligature.

Our next point is to consider whether there are any, and if so what, cases in which Wardrop's suggestion of ligature after the manner of Brasdor is admissible.

This operation has been performed eight times in aneurisms believed to be carotid. Of these only one—Lambert's case related by Wardrop ("On Aneurism," p. 36) is available to us, as proving, by the incontestable evidence of dissection, that the disease was limited to the carotid artery, and that the ligature had procured the obliteration of the tumour. The description of the diseased parts in Wardrop's work and the drawing (on his plate v.) show conclusively that the dilatation was limited to the root of the carotid, that it was entirely obliterated, and the mouth of the artery at the bifurcation of the innominate so firmly sealed that not a drop of water could be forced into it, and that this was effected by coagulum continuous with that which filled the artery on the cardiac side of the ligature.

But both clinical experience and published records go to prove that cases strictly amenable to Brasdor's operation are exceedingly rare. I believe that I have proved sufficiently, in my former course of lectures, that although portions of an aneurismal sac may be consolidated by the obliteration of one of the arteries which open out of it, the whole sac cannot be so. In an aortic aneurism involving the root of the carotid (whether right or left) ligature of the carotid may be a perfectly justifiable operation, may relieve urgent symptoms, save the patient's life by averting pressure on the trachea or other parts, and indefinitely suspend the progress of the disease. This has been the case in Mr. Heath's patient. But I see no prospect of radical cure, except in such a case as Lambert's, where the aneurism is limited to the root of the carotid itself, and such aneurisms are exceedingly rare. No specimen of the kind is to be found in the museums of this city, nor have I come across the description of any other case of the kind in any of the works I have consulted. Nor can such a case be diagnosed with certainty from aortic or innominate aneurism during life, as Montgomery's case sufficiently shows. Finally, I would add, that in many cases of this aneurismal dilatation of the root of the carotid the patient will live many years in moderate comfort, with no increase of the tumour. In the very case before us, Sir A. Cooper, who was consulted, stated it as his opinion that "it was aneurism by dilatation, which would not increase"; and there is but little in Mr. Lambert's account to show that this opinion was not a sound one, for though some increase was noticed during a fortnight's observation, this might have been only temporary.

The practical inference is, that the distal operation is justifiable in cases in which the symptoms are such as to indicate growth of the aneurism upwards along the course of the carotid, with increasing pressure on the trachea; but that it must be held to be a very dubious resource; and in any such case the effect of distal pressure on the carotid should be carefully noted. If it has no effect on the pulsation of the aneurism, this is a discouraging augury for the success of the distal operation, though I do not say that it is a contra-indication. If, on the other hand, it materially checks the pulsation, an attempt should be made to treat the aneurism by methodical pressure on the upper portion of the carotid.

It remains to speak of the bold operation carried out by Mr. Syme* in a case of traumatic aneurism resulting from a stab, which had punctured the left carotid artery so near to the clavicle that no pressure could be exercised below it, even after it had been exposed through the opening of the sac. The case is too well known to need quotation. It is a splendid example of bold and at the same time judicious surgery, and fully justifies the pride and pleasure with which Mr. Syme relates it. Nor can there be any question that a similar course ought to be followed in similar circumstances, which, however, can be rarely anticipated.

A more interesting practical question is, whether a somewhat similar course ought not to be followed in spontaneous aneurism, where the tumour extends so low that the proximal end of the artery can only be tied close to the sac. It seems, from the results of experience as above detailed, that inflammation is very prone to attack the tumour under these circumstances, and that many such cases prove fatal. The theoretical objection to Anel's operation—viz., that it necessitates ligature of the very portion of the artery which is most likely to prove diseased,—true as it is, is not here of any importance, for there is no choice. Having, then, tied one suspicious part of the artery, I see no extra danger in itself in tying a second ligature on a neighbouring part

* Observations in Clinical Surgery, p. 161.

of the vessel; while the removal of the tumour, the free incision into the sac and its surrounding cellular tissue, and the consequent absence of all danger of retention of the products of inflammation, appear to me to overbalance any increased risk from extending the operation. It is, however, a suggestion which has not as yet been put to the test of practice, as far as I can discover. M. Lefort's reference to an operation of the kind in the practice of a "surgeon of Leeds" I have not been able to verify.

I submit, then, that the experience of surgeons hitherto leads to the conclusion that aneurism of the trunk of the carotid artery may be very often treated successfully by compression, and that the cure by compression frequently leaves the artery unobliterated, and therefore exposes the patient to far less risk of cerebral mischief; that the ligature of the carotid for such tumours is extremely dangerous, and ought not to be undertaken until attempts, well devised and perseveringly carried out, have failed to effect the cure by compression; and that when the surgeon has been compelled by the position of the tumour to place his ligature close to the proximal side of the sac, it is worth very grave consideration whether it would not be better to evacuate the tumour, and tie the distal portion of the artery also; finally, that cases do occur in which Brasdor's method holds out a rational hope of cure, but that this operation ought not to be practised except in cases of growing aneurism, where distal pressure checks the pulsation of the tumour, yet has failed to effect a cure.

I turn now to aneurisms of the secondary carotids in the neck, of which the College museum contains two valuable specimens, one of the external, the other of the internal carotid (Nos. 1689, 1690); and I have already referred to the three examples of internal carotid aneurism under the care of Sir A. Cooper, Mr. Porter, and Mr. Syme. Other specimens are also to be found in our museums.

I must not spend much time on the diagnosis and treatment of aneurisms of the secondary carotids, or of the branches of the external carotid. I am not aware that any trustworthy diagnostic sign has as yet been pointed out by which the artery affected can be determined with certainty. Mr. Porter, in the paper referred to, lays great stress on the fact that pulsation is peculiarly perceptible from the pharynx in cases of aneurism of the internal carotid; and this fact he very naturally connects with the close proximity of that artery to the wall of the pharynx. Accordingly, he implies that this pharyngeal pulsation is a diagnostic sign of aneurism of the internal carotid. But examination of our Hunterian preparation of aneurism of the external carotid (No. 1690), will show that in this case also the aneurism is in equally close contact with the pharynx; and even in the large specimen of aneurism springing from the common carotid and growing upwards (No. 1686), the tumour so impinges on the pharynx that its pulsations must have been perceptible from the mouth. I conclude therefore that no trustworthy method exists for distinguishing an aneurism seated on the internal, the external, or one of the branches of the external carotid artery, unless it may be the condition of the pulse in the temporal, the affection of which would lead to the conclusion that the aneurism did not affect the internal carotid, or not the internal carotid only. But, as far as I see, it is impossible to distinguish between an aneurism seated on the external carotid and one affecting one of its numerous branches below the angle of the jaw. Spontaneous aneurism, however, of such small arteries as these latter is very rare.

I do not know that the diagnosis is of much practical importance. Aneurism (at least spontaneous) affecting any artery, a branch, primary or secondary, of the common carotid, and situated below the jaw, should, I think, be treated by measures directed to the common carotid—by compression, as long as it is tolerated and appears to check the growth of the sac, and, on its failure, by ligature. The close proximity of the reflex stream from the external carotid in aneurism of the internal carotid artery does not seem to interfere with cure after the Hunterian operation; at least, in Sir A. Cooper's case, though pulsation was distinctly perceptible for more than two months after the artery had been tied with two ligatures and divided between them, all went well. And there are several other cases on record, some of which I have mentioned, in which the persistence of pulsation in a carotid aneurism has not hindered cure, and where, therefore, there has been no opportunity to prove whether the disease affected one artery or the other. The same reasoning would lead us to believe that the numerous branches of the external carotid, and the free anastomoses which they have with the branches of the subclavian and of the other carotid, will form no barrier to the success of treatment similarly carried on. Without going so far as Broca, and saying that a certain amount of circulation through the tumour tends to harden the clot and promote cure—a doctrine which, I am afraid, will not stand criticism,—I think that surgical experience shows that such circulation is not inconsistent with the prospect of cure.

In cervical aneurisms, therefore, occurring spontaneously, and situated on one of the secondary carotids, or on one of the branches given off from the external carotid at that level (of which latter I have as yet found no perfectly satisfactory instance), I say that persevering efforts should be made to cure the disease by compression. The danger of suppuration of the sac is not so great as when the ligature is applied nearer the tumour, and ligature has been often successful. Yet the dangers of the operation are so numerous that I would exhaust every means in my power before resorting to it.

If pressure failed, I should prefer the ligature of the common to that of the external carotid, even for an affection presumed to be of the latter artery or one of its branches. The external carotid has hitherto, as far as I know, only been tied for wound, for hæmorrhage, for erectile or cirsoid tumour, for cancer of the tongue or jaw, or as a preliminary to operations.* Nor do I think that in aneurism situated below the jaw the diagnosis from internal carotid aneurism can be made with sufficient safety to justify the operation, even if there is room enough to perform it. The object of tying the external in preference to the common carotid, of course, is the avoidance of cerebral disturbance. There seems to me no motive for preferring the ligature of the internal carotid to that of the trunk. The artery is smaller, it is true, but the operation is more difficult, and the ligature is placed nearer the sac.

I am not by any means confident that the same practice should be followed in traumatic aneurism generally. The prospect of cure by measures directed to the artery at a considerable distance below the tumour, whether compression or the Hunterian ligature, appears to me to depend on the presence of a well-formed sac, possessing sufficient elasticity and resilience to contract vigorously on its contents when the force of the circulation is removed. If the sac seems deficient (as evidenced by imperfect or deficient pulsation), or even if it is very thin and no progress is made by careful compression, it may be better to treat it after Mr. Syme's fashion.

Aneurisms of the branches of the external carotid in the face or scalp (facial, temporal, or occipital) are almost always traumatic. The disease is rarely seen in museums because of no great gravity. Digital pressure, either on the sac itself or on the artery just above it, will almost always succeed. If it does not the sac may be laid open, and the two ends of the vessel tied, with a confident hope of success.

My list of hospital cases contains only two cases, both affecting the facial artery and both cured—in the one case by "ligature of the facial below the jaw," in the other by "excision of the sac."

But such aneurisms are very commonly treated with success without admission into hospital. I remember one of the temporal artery in one of our students, the result of the blow of a stone; and another is recorded of the coronary artery of the lip in a person of an eminent French surgeon. In each case the patient cured himself by direct pressure with his own finger.

* See on this subject the elaborate memoir of M. Guyon, Mém. de la Soc. de Chir., vol. vi.

BURGUNDY PITCH IN MALIGNANT PUSTULE.—Dr. Acacio Caldeira mentions successful cases of the above in *Jornal da Sociedade das Sciencias Medicas da Lisboa*. Under the influence of the application mortification is rapidly stopped, and the lesion is reduced to the condition of an ordinary wound. The substance is applied twice daily in the form of plaster, and better still in powder. A good plan is to sprinkle the powder first, and then cover the wound with the plaster. The epidermis must be removed so as to favour the effect of the powder.

ABSTRACT OF

Lectures

ON

VARIETIES IN THE MUSCLES OF MAN.

Delivered at the Royal College of Surgeons in June, 1873,

BY PROFESSOR HUMPHRY, M.D., F.R.S.,
OF CAMBRIDGE.

LECTURE II.

THE muscles connecting the upper limb with the trunk—the superior ventro-appendicular muscles—were described as in two sheets: a superficial and a deep sheet.

The superficial sheet—which, in some of the lower animals, as lepidosiren, forms an almost continuous funnel-like expansion from the trunk upon the limb, without defined divisions or boundaries—is, in man, divided into three segments or sectors: the pectoralis, the latissimus dorsi, and the trapezio-deltoid. These have tolerably definite boundaries at either end; though the segmentation from surrounding muscles is still not quite complete. Thus the pectoral muscle usually presents evidence of imperfect separation from the external oblique in the form of connecting slips; and the latissimus dorsi is commonly connected with the triceps. The varieties in the components of this sheet are, for the most part, due to a still less complete separation of them from one another, or from the contiguous muscles, at their proximal or their distal ends. The bands so often found more or less bridging over the axilla and passing from the latissimus dorsi or the pectoralis, or the ribs contiguous to them, to one or other of those muscles or to the humerus or the coracoid, and constituting the various "axillary muscles" or "achselbogen," are of this nature; also the blendings of the pectoral with the deltoid, and of the latter with the trapezius. The costo-epitrochlien was described as a segmented extension of the pectoralis. Various muscles described as cervico-humeral, cervico-clavicular, masto-scapular, occipito-scapular, &c., were shown to stand in a similar relation to the trapezius, and to form, with the rhomboids, fragments of a deeper layer of the trapezius. The varieties in the deeper layer of the pectoralis, which forms the pectoralis minor, are frequent, and consist chiefly of extensions of the muscle, over the caracoid, to the humerus, the capsule of the shoulder, the supra-spinatus tendon, &c.; simulating the disposition of the pectoralis minor in many of the lower animals and of the levator humeri in birds. The imperfection of concentration or limitation, distally, is shown by the extension of the latissimus dorsi and of the pectoralis down the arm, where they blend with the several muscles and more particularly with the triceps; and the deltoid is sometimes prolonged to the supinator longus, as in manis and birds.

The deeper layer of the ventro-appendicular sheet consists of the subclavius, the omo-hyoid, the levator scapulæ, and the serratus magnus. Of these the subclavius is sometimes prolonged in both directions, forming the sterno- or costo-scapularis. The omo-hyoid presents many varieties of imperfect concentration, being often extended upon the clavicle and sometimes being unsegmented from the sterno-thyroid; or it may spread upon the upper edge of the scapula as far as the levator scapulæ; and one or both bellies may be double or variously disposed. The levator scapulæ and the serratus may present the want of separation so common in lower animals; or they may be over-segmented, either being in two or more parts; and they may extend at their origin or insertion beyond the usual area.

The varieties in the deep muscles of the shoulder are few and unimportant.

The adducto-flexor muscles—coraco-brachialis, biceps, and brachialis anticus—offer many examples of imperfect separation and concentration. The two former retain a union at and near the coracoid in the normal state; and all three are liable to be variously blended and extended. The coraco-brachial is sometimes spread upon the inner side of the humerus, more or less approaching to its disposition in monotremes and reptiles. The biceps has often two or more origins from the humerus, and below is often connected with some of the muscles of the forearm. It is, rarely, partially inserted into the ulna, though this is often the case in lower animals, its action as a supinator of the forearm in man requiring its limitation to the radius. The brachialis anticus is sometimes imperfectly segmented, above, from the coraco-brachialis and the biceps, and, below, from the muscles of the forearm. The triceps presents few irregularities.

In the forearm the palmaris longus varies often and in every conceivable way. The other pronato-flexor muscles present many examples of deficiency of separation. In the normal state most of them retain some of the union which in the primitive form is more extensive; and the irregularities present many conditions of union intermediate between the normal and the primitive form. The internal condyle of the humerus and the coronoid process of the ulna were pointed out as the two chief meeting points or starting points of these muscles, especially the coronoid process; and many of the irregularities consist of unusual, or unusually extended, connexions with this process. The flexor longus pollicis, which is more segmented from other muscles in man than in the lower animals, still in him retains its hold upon this process, and often fails to be separate from the flexor digitorum. The numerous irregularities in the flexors of the fingers were alluded to in connexion with the varied disposition of these muscles in lower animals. The flexor sublimis and the flexor profundus are, together with the flexor longus pollicis, divisions of one muscle, and the retention of the union is often presented by slips passing between them, and by union of their tendons, and especially of those going to the little finger. The lumbricales, though usually remaining with the flexor profundus alone, sometimes are connected with the flexor sublimis, or with the flexor longus pollicis; or they may extend up to the coronoid process. The flexor carpi radialis sometimes extends above, upon the coronoid process, and is blended with the other muscles; and below, it may range upon the carpal bones, and upon the third and fourth metacarpals. A flexor carpi radialis brevis, passing from the radius to the carpal bones or the metacarpals, has in several instances been met with, and is a reminder of the extensive attachment of the pronato-flexor mass to the bones of the forearm, and to the carpus and the metacarpus in the Cryptobranch, and other Urodelans.

On the dorsal aspect of the forearm, the supinators and the radial extensors of the wrist are often incompletely separated from one another and from the adjacent muscles. The extensor digitorum is often not separated from the extensor carpi ulnaris; and the extensor minimi digiti is an incomplete segment from between them, which often ranges upon other fingers besides the fifth. In the deeper layer, the extensors of the thumb, which in man only are devoted each to its particular bone of the thumb, often fail to attain this individuality in him. They are frequently blended. Especially is this so with the extensor primi internodii, which has less expressed function than the others, and is often absent. In like manner the extensor indicis is frequently not separate, or it ranges upon other fingers, or it is absent.

LECTURE III.

In the lower limb the muscular irregularities are fewer than in the upper limb, owing, partly, to the less complex disposition of muscles in the limb, and to the absence, in consequence of the fixity of the pelvic girdle, of muscles, the homologues of which in the upper limb are the seat of many varieties. The sartorius is the most erratic of those passing from the pelvis, and it is the most variable in lower animals. The biceps, by its occasional connexions with the gluteus, and extension to the sacrum, and the crista of the ilium, harks back, as it were, to its primitive relations with these parts.* The adductors may be variously segmented. The semitendinosus, semimembranosus, and popliteus, do not vary much.

The irregularities in the calf-muscle are on the side of excess rather than of deficiency, although that muscle is in man more complicated than in any other animal. They consist chiefly in the presence of additional heads to the gastrocnemius, or in extensions of the origin of that muscle

* See British Medical Journal; Journal of Anatomy, vi. 365; Observations in Myology, p. 167.

and of the soleus. The plantaris is sometimes absent, or abnormally connected with adjacent parts above or below.

In the deep flexor muscles the most interesting varieties are in connexion with the accessorius, which is a remnant of the primitive wide attachment of the simple unsegmented flexor mass in the Urodelans to the bones of the leg, the tarsus, and the metatarsus. Accordingly extensions of it, or derivatives from or adjuncts to it, are often found spreading up the leg along the fibula, or widely connected with the tarsus. Below it is sometimes more largely united with the flexor digitorum than usual, or it joins the flexor hallucis or the lumbricales, or it gives off one of the flexor tendons of the toes. The varieties in the flexors of the toes consist chiefly in the closer union of the flexor digitorum and the flexor hallucis, as is the case in lower animals, and in the partial absence of the flexor brevis, or the blending of it with the flexor longus, which more particularly happens with regard to the division to the little toe.

On the dorsal aspect of the limb the quadriceps is but little liable to varieties. The portion of the tibialis anticus attached to the metatarsal bone is sometimes separate; and, further, is sometimes subdivided, one portion passing to the first phalanx, thus resembling the disposition of the extensor tendons to the pollex. Sometimes the tibialis anticus extends to the plantar fascia; or it ranges upon the dorsum of the foot, as in the hippopotamus. The peroneus longus seldom varies; though sometimes attached to other metatarsals in addition to the first, it rarely or never fails to reach the first. The other peronei often show their imperfect segmentation from the extensor digitorum by spreading upon the toes. Particularly is this the case with the peroneus tertius, the complete separation of which and its devotion exclusively to the tarsus is a human feature, and is related to the mode in which the fore part of the sole is planted fully upon the ground in man. The extensor digitorum sometimes shows a persistence of connexion with the metatarsal bones, with the extensor hallucis, and with the extensor brevis, which are reminders of the primitive oneness of the extensor mass, and which are evidences of imperfect segmentation of it. No instance had presented itself, however, of that extension to the fore part of the femur which is so frequent in other mammals. The varieties in the small muscles of the foot and hand were also discussed.

In indicating the relation between utility and variability, and showing that that which is most useful has, on the whole, the greatest stability, the Professor did not express any view as to the connexion between the two, or wish to prejudge the great questions associated with this subject and with the allied problem how that which is most fitted for its purpose in each animal and each part comes to be present. Other questions were alluded to. Whether, for instance, the variety in muscles which are of least importance, on the one hand, and in those which are peculiar to man, on the other, is an indication that those muscles are in process of being fixed in, or expunged from, the economy. Also, whether varieties are more or less frequent in the more advanced and more civilised members of the human family than in others. At present there is not sufficient evidence to furnish an affirmative answer to any of these questions, or to establish the hereditary transmission of muscular varieties which must be regarded as probable. The nerve-supply to the supernumerary muscles, in the few instances which have been described, seems to corroborate the view "that nerve-course is somewhat too arbitrary or too much regulated by convenience in each instance for us to be able to rely upon the disposition of the nerves as sure guides to the discernment, in difficult cases, of the homological relations of muscles and other structures."*

* Journal of Anatomy, vi. 56, Observations in Myology, p. 56.

SUBSTANCES INCREASING THE SECRETION OF MILK.—Various substances asserted to possess the above effects have recently been advocated. Dr. Ofinger, says *Il Morgagni*, recommends the use of galega officinalis, as both exciting the secretion, and improving the quality of the milk. He administers it in the form of syrup, and by tablespoonfuls daily. On the other hand, Dr. Barbaste (France), states that he has recently made use of cuminum cyminum with the very best effects, and that the peasant women of Dauphiné commonly employ the substance for that purpose.

DETERMINATION OF THE QUANTITY OF BLOOD DIFFUSED IN URINE IN HÆMATURIA.

BY CHARLES HENRY RALFE, M.A., M.B. CANTAB.,
PHYSICIAN TO THE BRAMPTON HOSPITAL.

CONSIDERABLE importance has always been attached to the appearance of blood in the urine, and physicians have long desired some simple method by which they might estimate the quantity present in any given case. The methods hitherto proposed are tedious, require considerable manipulative skill, and are unsuited for clinical purposes. I therefore suggest the employment of the *colorimetric* method of analysis as a simple and ready means of ascertaining the quantity of blood present in urine.

The colorimetric method is founded on the following plan of procedure. I filled a number of tall cylindrical glass vessels, capable of containing 100 centimetres, with urine, and to each vessel I added a definite quantity of fresh uncoagulated blood; to the first vessel two minims, to the second four minims, to the third six minims, and so on. As 16·3 minims equal 1 cubic centimetre, it is obvious that the first vessel contained 1 part of blood in about 800 of urine, the second 1 part in 400, and so on.

The colours given, when viewed by transmitted light, on the addition of the different quantities of blood to 100 c.c. of urine were then noted—

(*a*) With urine containing two, three, and four minims, the colour imparted was a brown sepia, or *smoky tint*. This tint was even perceptible when only one minim was added, or 1 part in 1600.

(*b*) In urine containing five, six, seven, and eight minims, the colour passed gradually from the smoky tint to *bright cherry-red*.

(*c*) In urine containing ten, twelve, to sixteen minims, the bright cherry-red passed into a *dull maroon-red colour*.

(*d*) After the addition of sixteen minims the urine acquired a *deep chocolate-brown*; and after twenty minims it was impossible to note any further change of colour.

Each of the four colours above given exhibited variation of shade and intensity according to the amount of blood added, the reaction of the urine, and the original depth of the urine itself. These points need not be enlarged upon at present.

Having obtained four distinct colours by the addition of varying quantities of blood to urine, I had next to learn how far these artificial solutions corresponded with urines obtained from actual cases. For example, the urine obtained from a patient suffering from acute nephritis exhibited the smoky tint; compared with an artificial solution, it corresponded to one containing four minims of blood, or 1 part in 400. The two urines were then boiled, liquor potassæ added, and again boiled; the reddish-brown precipitate, consisting of phosphates and hæmatin, removed by filtration and incinerated. The ash dissolved in hydrochloric acid was submitted to volumetric analysis with permanganate solution standardised, so that 1 c.c. represented ·0005 gramme of iron. Then it was found that the artificial solution required 7 c.c. of permanganate solution, denoting the presence of ·0035 gramme of iron; the other urine required 7·2 c.c. of permanganate, indicating ·0036 gramme of iron, thus showing a very close correspondence between the amount of iron derived from the hæmatin in both urines.

Other experiments with urines containing larger amounts of blood showed a similar correspondence.

From these observations the following clinical facts may, I venture to think, be deduced:—

1. That a *smoky brown* colour is imparted to urine when blood is present in quantities from 1 part in 1600 to 400. That a *cherry red* colour is given when 1 part in 350 to 200 is present. That a dull *maroon red* is given when 1 part in 150 to 100 is present. In more concentrated solutions, the colour assumes a deep *chocolate brown*.

2. That the quantity of blood which gives to urine these distinct colours is much less than has been hitherto supposed.

Queen Anne-street, W.

A CASE OF INTESTINAL OBSTRUCTION.

CONCEALED HERNIA; OPERATION.

BY HENRY SMITH,

SURGEON TO KING'S COLLEGE HOSPITAL.

ON Thursday, April 24th, I was requested by an old pupil to meet him and his partner in the case of a gentleman aged sixty, who was suffering from acute obstruction of the bowels. On visiting the patient, I found him in a very depressed state—an anxious countenance, small and frequent pulse, and restless. On examining the abdomen I found it very distended, but there was not any protrusion at either of the localities where a hernia is found. There was frequent vomiting. On ascertaining the history I found that on the previous Monday he had got up as usual to take his bath, and that on getting out a protrusion suddenly took place on the right side. He, however, readily pushed it back, but soon afterwards symptoms of obstruction came on, and continued with intensity, notwithstanding the use of the usual remedies, until Wednesday, when the assistance of a very distinguished physician was sought. Careful search was made for the presence of a hernia, especially as it was learnt that a truss had been worn until three years previously, when it was omitted, as the hernia seemed cured. A conclusion was arrived at that the obstruction depended upon some cause situated higher up.

On learning the history of the case, and seeing the peril the patient was in, I, without hesitation, expressed the opinion that it was the absolute duty of the surgeon to explore the inguinal ring without delay, although, on careful examination, I could get my finger well into it and felt nothing. The patient was placed under the influence of chloroform, and I carefully dissected down to the inguinal ring, and after having cut through the various textures, came down upon a small hernial sac. On puncturing this a quantity of fluid spurted out, and on looking further a small knuckle of intestine came into view. It was black, but not unfit for reduction, but it was so very tightly gripped by the neck of the sac that it required the utmost care on my part to release the bowel without doing mischief. There was no complication beyond this, and I returned the gut fairly into the abdominal cavity, satisfying myself that all was clear.

The patient was so exhausted before the operation that this afforded only a slight chance. Soon afterwards the bowels acted freely, but he did not rally from his exhaustion, and died twenty-two hours after the operation.

I make no apology for relating this case, for although in this particular instance the art of surgery was unavailing as regards the salvation of life, we are taught what is the proper course to pursue under conditions of a similar nature. I think there cannot be a doubt for a moment that, given a case of well-marked obstruction of the intestinal tract, where there is the history of a hernia having existed at some previous period, and where the symptoms are not relieved in a few hours, it is the bounden duty of the surgeon to explore the seat of the pre-existing hernia, although there is not the least local evidence of a hernia at the time. A careful surgeon can do no harm by such exploration, and even if there be no hernia found, and the patient die with the obstruction unrelieved, and situated elsewhere, he will feel that he has simply acted according to the dictates of common sense and the rules of surgery; whereas should he, as was the case here, be correct in his diagnosis, and come down upon a piece of strangulated gut, he will save his patient's life if too great a delay has not taken place. I think that we cannot too strongly, or too sternly, lay down the rule in such cases, "When in doubt operate."

Wimpole-street, W.

MEDICAL STUDENTS. — The number of medical students who, in 1872, registered in accordance with the requirements of the Medical Council at the commencement of their medical studies was 1317—viz., 636 in England, 324 in Scotland, and 357 in Ireland. In the preceding year the total number was 1254, or 63 less—viz., 563 in England, 340 in Scotland, and 351 in Ireland.

FURTHER OBSERVATIONS ON

THE ENGADINE AS A HEALTH-RESORT.

BY J. BURNEY YEO, M.B., M.R.C.P.,

HON. FELLOW OF KING'S COLLEGE, ASSISTANT-PHYSICIAN TO KING'S COLLEGE AND THE BROMPTON HOSPITALS.

(*Concluded from page 839.*)

I WISH to speak with reserve of the Upper Engadine as a resort for consumptive patients, because I have been suspected, wherefore I know not, of a bias against it. I ought to explain, however, that in the case of a watering-place like St. Moritz its enthusiastic admirers, and those directly interested in its progress, regard, or feign to regard, anyone who questions its universal applicability to every possible case of illness as prejudiced against it. If in the whole course of a season I recommended as many as three persons to remove from St. Moritz, there were not wanting persons of influence to accuse me of a prejudiced desire to send everybody away from the place; so difficult is it to be candid!

But to return to the question of consumption in the Engadine. In the first place I quite believe there are certain cases of phthisis that do well there; but I also believe that these are the very cases that do well, for a time, in other localities, and in no case that I have ever heard of or seen has it been more efficacious than a sea voyage, while I do not consider it anything like so widely applicable.

I have seen cases of phthisis pass from the first into the second, and from the second into the third stage at St. Moritz. I have seen a case of phthisis arrive in the Engadine on Tuesday and die the Thursday following. Cases of phthisis have died at St. Moritz which I have not seen, and cases have died at home soon after trying the Engadine.

All the statements that have been published about the influence of the Engadine in arresting or curing consumption, as well as those in the other direction which I have just recorded, are very easily explicable to anyone who has had to do with phthisical patients on a large scale. There are cases, even in the initial stage, which the practised eye sees at once are quite hopeless under any circumstances. Such cases live longer in the quiet and comfort of home than anywhere else. In other cases it is equally easy to discern that, under careful management, the disease may be arrested; and it is in such cases that we have to weigh carefully the probable influence of climate. Many of these cases, however, do remarkably well in London. I have under my observation at this moment a striking case of rapid and complete arrest of destructive disease of both lungs at Gravesend!

There is another class of cases to which the average climate of England is peculiarly irritating and destructive. These are the cases that have made the fortunes of southern watering-places, and for which I have not been able to find that the Engadine possesses greater or equal advantages. It is quite unsuited to cases in which large tracts of lung-tissue are disorganised or disabled. With only a small amount of available breathing-space, and only very thin air to breathe, the difficulty of breathing becomes intense, and the patient to whom I have alluded as dying so rapidly after arrival at St. Moritz, practically died suffocated. It is obvious that if a man is in danger of dying from starvation because he can only digest a wineglassful of milk every few hours, you aggravate his prospect of starvation by mixing water with the milk you give him. It is the same if you send a patient, who can take in only a small quantity of air at each respiration, to breathe the thin air of the Engadine. Such a person should breathe condensed rather than rarefied air. A patient with emphysematous lungs might as well tie a rope around his throat at home as take the trouble to go to St. Moritz to experience the same sensations.

But, on the other hand, there are certain cases of disease of the respiratory passages which are manifestly benefited by breathing air of this dry and bracing character. I allude to cases of chronic laryngeal catarrh, chronic bronchial

catarrh in *young* persons, with hyperæsthesia of the mucous membrane, and chronic catarrhal pneumonia, when limited to the apices of the lungs. In such cases the stimulus and incentive to increased bodily exercise which the air of the Engadine produces, and the activity of the respiratory and circulatory functions which is there aroused, tend to set up a more healthy nutritive action in the pulmonary mucous membrane.

The class of cases in which the climate of the Engadine has appeared to me to be of most use have been those of profound anæmia, associated with nervous exhaustion and irritability — those cases of so-called cerebral anæmia, which are frequently the result of excess of brain-work, intellectual or emotional. The benefit in such cases is often not at once apparent, and is occasionally experienced more after leaving St. Moritz than while staying there. The attacks of giddiness which such patients suffer from are often aggravated on their first arrival in the Engadine. It is common to find these, and others also, complain of uncomfortable feelings in the head, fulness, dizziness, and sometimes a condition bordering on delirium. In cases of anæmia, these symptoms pass away after a few days, but in cases of gout, of chronic rheumatism, and of hepatic disorders, the uncomfortable sensations in the head continue, and they often produce considerable alarm by coming on in the night; such patients had better at once take the hint that nature gives them, and remove to a less elevated and a warmer region.

Cases of over-sensitiveness of the skin, giving rise to the tendency to "catch cold" easily, are usually much benefited by a season at St. Moritz.

With regard to St. Moritz itself, one is compelled to admit that places, like men, are rarely improved by popularity. Those who knew St. Moritz five years ago will feel something like sadness when they revisit it now. They will miss its simplicity of manners, its primitive accommodation, its cheapness, and its comparative seclusion. They will find a number of new flaunting villas and modern hotels surrounding the old village; they will find the natives avaricious, and their charges exorbitant, though the accommodation is somewhat improved; and they will find themselves in the midst of a heterogeneous crowd gathered from every quarter of the globe, but chiefly proceeding from those large towns of southern Europe when they become (literally) too hot for their inhabitants. If you have, during the months of winter in Rome, Naples, Florence, or Nice, been amused by the companionship or bored by the intrusiveness of some new acquaintance, you will find him at St. Moritz in July and August ready to amuse or bore you again.

There is one place, however—quite as conveniently near the baths as the village of St. Moritz itself,—where much of what is objectionable in St. Moritz may be avoided. I mean the hamlet of Campfer. There is an excellent hotel in the place—the Julier-Hof, kept by M. Muller. It is only due to M. Muller to say that he spares no pains to make his hotel as comfortable and as quiet and select as any English family could wish. The food and the cooking are uniformly good. The accommodation at his disposal is, of course, limited, and early application is necessary in order to secure rooms during the months of July and August.

Finally, I would have it constantly borne in mind that there is great variableness in the seasons in the Upper Engadine. The climate of St. Moritz in August, 1869, was very different from the climate of St. Moritz in August, 1870; while the season of 1871 was still more unlike the season of 1872. In August, 1871, there were as many as twenty-one fine days; and out of the nine days on which rain fell five were merely cloudy and showery. There was no severe cold and no snow, and many of the fine days were really warm summer days. In August, 1872, after some very hot days towards the end of July, the weather became very cold, and on the 3rd August the whole valley was covered with snow. Snow fell frequently during the month. There were thirteen fine days, most of which were cold; and eighteen days on which rain or snow fell, and most of these were very cold. Many persons who bore the season of 1871 well and left greatly benefited, suffered much in the season of 1872, and looked forward anxiously to their removal; while many cases of severe forms of illness occurred which were unknown during the milder season.

I must reserve some observations on other health-resorts in the neighbourhood of the Engadine for another communication.

St. James's-street, W.

BIBLICAL OBSTETRICS.

BY EDWARD ELLIS, M.D.,

PHYSICIAN TO THE VICTORIA HOSPITAL FOR CHILDREN, LATE PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

REFERENCES to matters of science or of natural history are in Holy Writ rather parenthetic or illustrative than direct; customs are described here and there as the historian would describe them, but always with a specific moral purpose; and when allusion is made to scientific matters, it is in brief terms and popular language. But scattered up and down the pages of the Old Testament will be found a good number of references to the midwifery and gynæcological knowledge of the Hebrews, not, I think, without interest, and which I have endeavoured to bring together in the following paper.

The first mention of a midwife occurs in Genesis XXXV., 17; not a very encouraging mention this, however. It was Rachel's second labour, and the midwife lost her patient. A little further on, in the first chapter of Exodus, we have something far more remarkable. In the first place, it seems there were but two midwives for the whole Israelitish community, and their names are given as Shiprah and Puah; honourable women they were, disregarding the cruel edict of the tyrant Pharaoh to slay the men-children, and with the ready wit of their sex defending themselves when interrogated by the king why they had spared the male infants, by saying "that the Hebrew women were not as the Egyptian women, for they are lively and are delivered ere the midwives come in unto them."

Four cases of labour only are alluded to; curiously enough, the first and third were twin cases, the second and fourth fatal ones. They are the cases of Rebekah, of Rachel, of Tamar, and of the wife of Phinehas. It is recorded of the case of Rebekah's twins, that the last took hold of the heel of the first—probably a very rapid delivery. Rachel's was a case of "hard labour," specially so called, proving that at this early period of the world's history, modern accoucheuring difficulties were not unknown. In all likelihood this was a "breech" case, or the midwife could scarcely have said, "Fear not, thou shalt have this son also." The case of Tamar was twins, the child whose hand first protruded afterwards receding, his brother coming down and being born first. The case of the wife of Phinehas was especially a sad one: the news that the "ark of God was taken," her father-in-law and her husband both dead, brought on her labour somewhat prematurely, and she died. In her case also the woman tried to comfort her by saying, "Fear not, thou hast borne a son," but she did not regard it, except to name the little one "Ichabod"—the glory is departed from Israel. This might have been a case of uncontrollable hæmorrhage from shock.

No case is recorded of a stillborn child, but such cases evidently occurred, for Aaron, when he saw Miriam's leprosy, said, "Let her not be as one dead, of whom the flesh is half consumed when he cometh out of his mother's womb." This might perhaps be taken to refer to a monstrous birth also; but the reference in 2 Esdras v. 8 is remarkable, "Menstruous women shall bring forth monsters." So no direct case of miscarriage is recorded, but the fact is three times used metaphorically; in Job iii. 16, "As an untimely birth I had not been"; in Eccles. vi. 3, "An untimely birth is better than he"; and in Psalm lviii. 8. "Job" is believed by many to be the most ancient of the sacred writings; miscarriages were, therefore, evidently of occurrence from the very earliest time. And overlaying is at least as old as the time of Solomon, where the child of one of the harlots (to whom he delivered his memorable judgment) "died in the night because she overlaid it." In the case of these two women it would appear that no midwife was present, or any person to assist them. Suckling is alluded to four times—once in this very place, the woman rising up on the third day to give her child suck. Again, Hannah

would not go to the Temple till she had weaned Samuel. In Maccabees ii. 7—27, a woman says, "O my son, have pity upon me that bare thee nine months in my womb, and gave thee *suck three years*, and nourished thee," &c. Scripture does not affirm that suckling commonly prevents conception, but in Hosea i. 8 are these words: "Now, when she (Gomer) had weaned Lo-ruhamah, she conceived, and bare a son."

The references to the menstrual period, the intense defilement it was held to confer upon the woman—e.g., in Lamentations i. 17, "Jerusalem is as a menstruous woman among them"; to barrenness as a mark of disgrace and divine displeasure, and several other similar matters, are also sufficiently curious; but their consideration must be deferred to another opportunity.

Fitzroy-street, Fitzroy-square, W.

NOTES OF A

FATAL CASE OF ACUTE PEMPHIGUS AND GANGRENE,

FOLLOWING A MEAL OF PUTRID CONGER EEL.

BY IZETT W. ANDERSON, M.D. EDIN.

J. D——, a black man, aged thirty, generally enjoyed good health, although a man by no means choice in his food, as he frequently ate garbage of all kinds. On Tuesday evening, the 5th of November, he stewed and ate the head, tail, and liver of a large conger eel (Gymnothorax rostratus of Richard Hill) which, having been killed the previous day, was in a semi-putrid condition. Soon after he was attacked with vomiting, purging, and itching of the skin, which continued until Thursday morning, the 7th. He then came to me complaining of slight purging, cramps of the legs, and itching of the skin, to relieve which I ordered two grains of calomel and ten grains of Dover's powder. On Saturday, the 9th, he appeared quite well, and continued so until Thursday, the 14th, when he complained of colic and constipation, for which he had a dose of castor oil. The next day he showed me several large circular and oval white patches on his right buttock, produced by removal of the cuticle. The next day these appeared over the sacrum and the other buttock; and were, I ascertained, caused by large bullæ full of a bloody fluid, which coalescing and rupturing loosened the cuticle, which the patient soon removed in attempting to alleviate the intense itching that existed. The bullæ next appeared on the abdomen, and extended until a circular portion of skin about nine inches in diameter was denuded of cuticle. The front and sides of the lower part of both thighs, the knees, and upper part of the legs were attacked, and the disease extended until the cuticle was removed over a space about ten inches in length. They next appeared on the front of both elbow-joints, and covered a space about ten inches in length by four in breadth. A few isolated ones showed themselves on the front of both legs and feet. The bullæ varied in size, and contained bloody fluid, and on removal of the cuticle the true skin was found covered with a thin, grey, tenacious substance, which was either a superficial slough or a species of diphtheritic exudation. Intolerable itching preceded and accompanied the formation of the bullæ, and the patient was continually scratching the raw surfaces until they bled. The different crops of bullæ did not all come out at the same time, but successively, in the order above-mentioned. During the progress of the eruption, both forearms became considerably swollen, and both hands passed into a state of moist gangrene, all the tissues being white, swollen, emphysematous, and infiltrated with sero-purulent fluid. All the fingers were affected with the dry form of gangrene, and became shrivelled, dry, and horny. Two toes were also attacked with dry gangrene. Soon after the commencement of the eruption the patient's vital powers rapidly declined, until he sank into a typhoid condition, from which he never rallied, and ultimately death took place on the 30th of November, twenty-five days after eating the putrid conger eel. Treatment was entirely of a stimulating nature, milk, soup, and alcohol being given to a large amount, together with mineral acids, quinine, iron, and occasionally opiates. The raw surfaces were dressed with cotton wadding, and a mixture of olive oil, lime-water, and carbolic acid.

On post-mortem examination the organs were all found healthy except the liver, which was much congested. The lungs were extremely anæmic, being of the same colour as white paper. No secondary purulent deposits were found.

Remarks.—This case is, I think, a rare one, not only from the peculiar symptoms, but also from their chronic nature. Acute cases of fish-poisoning are by no means rare in the West Indies, and they are sometimes fatal. Vomiting, purging, and urticaria, with collapse, often follow the use of certain fish, but I have never heard of a case where acute pemphigus and gangrene came on and caused death as long as twenty-five days after eating the fish. I have no intention of entering on the extensive subject of the poisonous fish of the West Indies, but I may remark that some are poisonous only at certain seasons or in certain localities, while others are poisonous at all times and in all places. The conger eel is recognised as one of those that are occasionally poisonous. Old fishermen tell me that, although they often eat the conger eel, they have known persons die after eating it in a perfectly fresh condition. They, however, invariably reject the head and liver, which (with what truth I know not) they consider poisonous, and prepare the fish for cooking by well rubbing it with lime-juice and salt. Little doubt, I think, can exist that all the peculiar symptoms in this case arose from the meal of putrid conger eel. It is, however, difficult to state whether they were caused by the eel containing some poisonous principle in itself, or whether they were due simply to its being in a putrid state, or to both those conditions combined.

Kingston, Jamaica.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

SUDDEN DEATH IN CEREBRAL DISEASE; NECESSITY OF ROUTINE OPHTHALMOSCOPICAL EXAMINATIONS IN CASES OF DISEASE OF THE BRAIN.

(Under the care of Dr. HUGHLINGS JACKSON.)

IN our "Mirror" of March 29th, 1873, we reported remarks by Dr. Hughlings Jackson on *sudden* death in several cases of adventitious products of the cerebellum. The following case is another illustration of sudden death, we do not say from cerebral tumour, as no autopsy could be obtained, but in a case of cerebral disease; probably there was a tumour. In cases of vascular tumour of the brain death may occur by hæmorrhage from the growth; but death was too rapid in the case we are about to relate for any variety of intracranial hæmorrhage except that from rupture of an aneurism of a *large* cerebral artery. There was no likelihood of such aneurism in this instance. The case shows also the importance of the *routine* use of the ophthalmoscope. It might easily have been mistaken for one of hysteria, or, by careless persons, for some affection of the liver. The woman always looked well. But such mistakes could not possibly have been made in this case after the use of the ophthalmoscope: optic neuritis is always a serious matter. At the very first the patient's husband was told that she was very dangerously ill. As she rapidly improved under *large doses* of iodide of potassium, it might be supposed that the intracranial disease was syphilitic: this is not really likely. There was certainly nothing *characteristic of* syphilis about the case. The symptoms were just those which so commonly result from adventitious products of all sorts.

A woman, aged twenty-eight, attended first Oct. 26th, 1872, for severe pain in the head, coming on in paroxysms, and for vomiting. The history she gave was obscure. It seemed probable that about a year before she had had

double vision. She would occasionally fall down, and she had fits of some kind, beginning in the left leg. Because she had *pain in the head* an ophthalmoscopic examination was made. Being a very nervous woman, she seemed slightly alarmed at this procedure, and said, excitedly, "There's nothing the matter with my eyes." She did read No. 1¼ of Snellen with each eye very easily, and, indeed, appeared to see quite well. Nevertheless, she had double optic neuritis well marked. "Latent optic neuritis" is, Dr. Hughlings Jackson says, very common, and as it may *pass off* without producing any defect of sight, those who do not use the ophthalmoscope by routine in cerebral cases must frequently overlook a pathological condition of great diagnostic value. It is diagnostic, not of the position, but of the *general* nature of the disease; it points to an adventitious product of some kind—not of any special kind. However obscure this case may be in other respects, there can be no reasonable doubt that there was an adventitious product within the cranium. Under iodide of potassium in large doses she got well, or rather to feel well, for the neuritis had not passed off when she ceased to attend. Her sight was better at each visit, and found to be normal. She came again for the same kind of symptoms Feb. 3rd, 1873, and for attacks of giddiness, from which she would fall. At this time some swelling of the discs remained, *but she could still see well;* she easily read out No. 1¼ Snellen as before. The patient was again improving, when, on March 23rd, she died suddenly. The evening before she had been out marketing with her husband. In the night she said she was not so well, got up, walked about, said she felt better, returned to bed, again said she felt not so well, and died immediately. At her last visit she seemed to be a fine healthy woman, except for nervousness and an air of simple weariness. There was an inquest, but no autopsy.

GUY'S HOSPITAL.

COMPOUND COMMINUTED FRACTURE OF THE LOWER MAXILLA; NECROSIS; REMOVAL OF THE BONE.

(Under the care of Mr. BRYANT.)

THE following case, for the notes of which we are indebted to Mr. E. O. Giblin, is exceedingly interesting from a clinical as well as a pathological point of view. Clinically, because the fractures of the condyles of the bone were mistaken at first for dislocation forwards; pathologically, as the whole of the maxilla necrosed and came away piecemeal, but was replaced by osseous material, resulting in a complete but imperfectly-formed lower jaw.

James W——, aged thirty-eight, was admitted on July 9th, 1871. From his friends it was gathered that he had fallen from some steps, and in the fall had struck his chin against them. He presented the appearance of double dislocation of the lower jaw, and on further examination it was discovered that he had a compound fracture between the left incisor and canine teeth. There was a wound in his mouth which bled profusely, and an external one two inches long, near the symphysis. Both condyles were dislocated forwards under the zygoma. On the reduction of the dislocations the jaw slipped forward again, but was kept in position by a four-tailed bandage. The fracture at the symphysis was treated by twisting some wire round the incisor and canine teeth. A plug of wood was placed between the jaws to keep them even.

July 20th.—Patient takes very little food; he perspires a good deal, looks anxious, and wandered in the night. The wooden plug came out. His face has swollen somewhat. To take one ounce of quinine mixture three times a day.

21st.—A large quantity of pus has come away from the right side of the jaw; swelling in face less; feet cold; hot fomentations applied; temperature 101·2°. Had one-third of a grain of morphia by injection.

22nd.—The bandage has been removed from his face; he is very much convulsed at times, and lies in a semi-comatose state; temperature 102°; has roughened respiration at the apex of both lungs.

24th.—Mr. Bryant made an incision down to the ramus of the jaw on the left side of the face. No pus came away, but bloody serum of a very offensive smell.

Aug. 1st.—The wound has continued to discharge very offensive pus. To-day Mr. Bryant opened a swelling on the right cheek, cutting down to the periosteum. Blood and serum with offensive odour came out. He thought that there had been no dislocation, but fracture of both condyles.

5th.—Patient improving. Free discharge of pus. Has brandy, ale, milk, and eggs.

8th.—Had cold shivering attacks last night. Left face much swollen. Has severe headache. Mr. Bryant detected dead bone on probing the left wound, but could discover none on the right side. Temperature 98·5°.

10th.—Mr. Bryant, on passing his finger into the patient's mouth, found that the fracture near the symphysis menti had not united. A good deal of pus collects in the mouth. To wash his mouth with permanganate of potash solution.

26th.—Has been improving gradually. Is troubled a good deal with cough, for which he has taken medicine. During the last few days there has been swelling just under the right ear. This was incised to-day, and pus freely discharged. The lower jaw is receding.

Sept. 8th.—An abscess beneath and on the left side of the jaw has been increasing in size, and was opened to-day, when about an ounce of fetid pus was discharged.

Oct. 6th.—Chloroform having been administered, a probe was passed into the sinus on the left side at the upper part of the ramus, and a cavity detected, and, with gentle pressure, the probe entered the mouth. An incision was then made in the line of the lower edge of the jaw, and two pieces of necrosed bone removed from the outer surface of the ramus.

24th.—Several pieces of necrosed bone were removed from the right ramus and from near the symphysis.

30th.—Swelling considerably diminished. No pain or discharge from the remaining sinus. Left the hospital.

Feb. 9th, 1872.—Readmitted. During his absence from the hospital several pieces of dead bone have come away. Patient cannot now masticate his food, and the lower jaw has receded very much, so that the teeth in the upper and lower jaws are not opposite.

16th.—The sinus on the right side was opened, and several pieces of necrosed bone were removed. On the left side the bone was found so deeply involved that it was thought best to postpone further operation.

26th.—Has been better since the operation. Left the hospital again; to return if necessary.

Oct. 23rd.—Readmitted. On the left side there are several sinuses which lead up to dead bone. General health good.

25th.—Several pieces of necrosed bone removed.

Nov. 1st.—Mr. Moon, dental surgeon, examined the patient, and said that the two back teeth of the upper jaw had been removed. It would be a difficult matter to fit teeth to the irregular jaw, which, when the mouth was closed, was much posterior to its normal position. The patient left the hospital, to return if any further trouble should arise.

GENERAL HOSPITAL, BIRMINGHAM.

CASE OF POISONING BY CARBOLIC ACID.

(Under the care of Dr. RUSSELL.)

FOR the following notes we are indebted to Mr. E. Rickards.

A girl aged seven was admitted into the hospital two months ago, having ten minutes previously swallowed, by mistake, about half an ounce of carbolic acid diluted with twice that amount of glycerine and water.

On admission the child was quite insensible; pulse hardly perceptible; pupils contracted; conjunctivæ insensible to touch; temperature below normal; respiration catching, and about sixteen to the minute. The stomach was washed out by the stomach-pump. Some gruel and oil given, and an enema of brandy administered, and the heat of the body maintained by appropriate means. The child died comatose one hour and fifteen minutes after admission.

Autopsy, twenty-four hours after death.—Rigor mortis was persistent. After ligaturing the venæ cavæ close to the heart, the right side was found to contain three ounces of blood, which was of dark colour and quite fluid. This was the case also in the large vessels. The left ventricle

had its walls firmly contracted, and contained about two drachms of blood. No abnormality was noticed in the lungs or any abdominal viscus, except the alimentary canal. The abdominal cavity smelt strongly of carbolic acid. The bladder contained about half an ounce of urine, which smelt strongly of the acid and yielded the reactions for that acid. There was no albumen in it. The tongue, mouth, pharynx, larynx, œsophagus, stomach, and the first two inches of the duodenum appeared quite unaffected by the drug. The small intestine for three feet was much changed. It was covered with a white eschar, the valvulæ conniventes having suffered most. The mischief seemed confined to the mucous membrane. The brain contained much venous blood, as did also the sinuses. The blood was quite fluid. There was no effusion. The ventricles were quite dry. There was no cerebro-spinal fluid whatever. The whole brain had a strong odour of carbolic acid.

CHELMSFORD INFIRMARY.

THREE FRACTURES OF ONE UPPER EXTREMITY; EXCELLENT RECOVERY.

(Under the care of Dr. NICHOLLS.)

THE recovery from such extensive injuries as those detailed below, even in the upper limb, in a man nearly sixty years of age, is certainly very remarkable, the favourable result no doubt being due to a combination of mitigating circumstances, as the seat of the injury, previous health of the patient, residence, and last, but not least, the treatment.

W. R——, aged fifty-nine years, a farm labourer, was admitted on the 24th of March last, having half an hour before been knocked down and dragged by a heavy waggon and horses. On examination his condition was as follows: Pale, collapsed, and almost pulseless; two or three scalp wounds, deep but not extensive; his face much cut and bruised, as was also the posterior part of the whole right side of his body. The left upper extremity, however, received the greatest injury—namely, a simple fracture of the humerus about two inches below its neck, a compound fracture of the same bone at the junction of its middle with its lower third, a small wound on the posterior aspect of the limb bleeding very freely, displacement backwards of both bones of the forearm at the elbow-joint, and, lastly, the radius and ulna were both fractured about their middle. In addition to these extensive injuries the whole limb was much contused, and the skin grazed. The wound communicating with the fracture was closed with cotton-wool steeped in carbolised oil; the rest of the limb, lightly covered with cotton-wool, was placed on a straight splint (the fractures, and also the dislocated bones, were adjusted with the greatest ease), and a bandage was lightly placed over the whole.

The patient, whose home was at a village inn, was in the habit of freely partaking of beer. He was ordered two ounces of brandy and thirty drops of laudanum every three hours. Reaction took place but very slowly, and was not complete for thirty-six hours. On the 26th March his pulse was 145; tongue coated, dry, and brown; temperature 101°, with slight delirium. The hand looked dark, and altogether the case was very unpromising. To discontinue the stimulants and have beef-tea freely and saline mixture. On the 27th there was free and very offensive discharge from the limb. On removal of dressings and splint, the limb was found covered, where the skin had remained intact, with large dark vesicles, altogether looking most threatening. All bandages and dressings were now discarded, and the arm placed on a pillow and covered lightly with cloths dipped in a solution of carbolic acid in water, one to fifteen. From this time the progress of the case was most satisfactory. The fractures united and were on the 12th of May firm, the elbow could be extended and slightly flexed, and the man sat up and daily recovered health and strength. The symmetry of the limb is certainly anything but perfect, but considering the extent of the injuries, together with the age and habits of the patient, the wonder is that he has saved his arm and life, or, in other words, that nature has so favoured him.

Reviews and Notices of Books.

On the Temperature of the Body as a means of Diagnosis and Prognosis in Phthisis. By SIDNEY RINGER, M.D., Professor of Materia Medica and Therapeutics at University College, Physician to University College Hospital. Second Edition. London: H. K. Lewis. 1873.

THERE is no more subtle question than that which relates to heat-increment in phthisis; and the difficulty of discriminating between the arguments for assigning it to the general conditions of the body and those for attributing it to the local irritation of the tubercle is well exemplified by the apparent discrepancies into which Dr. Ringer falls in his excellent treatise on the subject.

In the Introduction, Dr. Ringer, combating an erroneous inference drawn by Dr. Bathurst Woodman from statements in the first edition of his book, says: "I had sought to prove that the temperature is raised only during the formation of deposit, and that when this ceased then the temperature became normal; and that these thermometric indications afforded a delicate and a valuable test of the continuance, the amount, and the cessation of the tuberculisation." But in the third of the eight propositions with which his book opens he adds: "This elevation is probably due to the general condition of the body (tuberculosis), rather than to the deposition of the tubercle (tuberculisation)." How, then, can the temperature be taken as a measure of the amount of the tuberculosis and tuberculisation, if its production is to be assigned more to the former than to the latter, unless it be maintained that these conditions bear a fixed ratio to each other, and advance *pari passu* independent of all other causes? But this is negatived by the statement at page 18—"It thus appears that a small amount of disease corresponds to a considerable and long-sustained elevation of temperature"; and at page 19—"Thus croupous pneumonia sufficient to cause an elevation of the temperature equal to that met with in the cases just referred to would in a few days cause entire consolidation of both lungs. The author thinks that in proportion to the right he has to argue from such analogy is the probability that the elevation of the temperature is due rather to the general than the local condition existing in phthisis." If, then, the tuberculosis and tuberculisation do not bear a proportionate relation to the temperature, it is impossible that they can be measured by a common index. Again, at p. 11, it is "admitted that in some very chronic cases either of tuberculisation or catarrhal pneumonia, the disease progresses so slowly and the *deposit* at any one time is so slight, that it is insufficient to elevate the temperature, unless very slightly." Also, at p. 13:—"The foregoing remarks render it obvious that a natural temperature must not lead us to conclude that this disease is not slowly spreading, since *the accident of tuberculisation* or of catarrhal pneumonia *may be too slight to raise the temperature.*" Here the elevation is directly referred to the irritation of the deposit, and not to the general condition.

The arguments which Dr. Ringer so ably advances for the proposition which he seeks to maintain, if they do not fully support his conclusions, at least point to a valuable means of distinguishing between the heated outburst of acute tuberculosis and the insidious development of chronic phthisis, and may on further observation help to establish a more material difference between these two diseases, or varieties of disease, which have so long been classed in the same category.

The practitioner will find the book under notice most useful. It has rapidly reached a second edition, and will probably run to a third.

OUR LIBRARY TABLE.

Archives of Scientific and Practical Medicine. Edited by C. E. BROWN-SÉQUARD, M.D., assisted by E. C. SEQUIN, M.D. New York: Lippincott and Co. London: Williams and Norgate.—A new journal bearing the above title, published in New York by Dr. Brown-Séquard in conjunction with Dr. Sequin, promises to be of great value to the practitioner. The first number contains, *inter alia*, the following articles:—"An Account of a Case of Traumatic Brachial Neuralgia treated by Excision of the Cords of the Brachial Plexus," by Henry Sands and E. C. Sequin; a paper on "Cerebral and Visceral Embolism," by Dr. Draper; "The Abnormal Galvanic Reaction of the Acoustic Nerve in Chlorosis and Bright's Disease," by Dr. Neftel; "On the Treatment of Functional Dyspepsia, Anæmia, and Chlorosis," by Dr. Brown-Séquard; "The Reproduction of Portions of the Vertebræ after Resection," by E. Dupuy; "A Case of Disseminated Sclerosis of the Brain and Spinal Cord"; "Remarks on some Effects of Injuries of Nerves," by Dr. Brown-Séquard; with various reviews and bibliographical notices. Lastly, an eminently interesting section by Dr. Brown-Séquard, occupied with giving the state of our knowledge on some great medical questions, the present paper being on the sudden or rapid arrest of many normal or morbid phenomena. The first paper in the third number now before us, by Dr. Austin Flint, contains the record of twenty cases of thoracentesis by means of what is now known as aspiration; the fluid being removed more or less by suction, and various instruments employed. The second communication is upon "Thermometry in Cerebro-spinal Meningitis," by Dr. C. F. Rodenstein, who proposes to designate the disease in question as "tetanoid fever," in place of the names more commonly employed. The third article is devoted to the consideration of "Dry Pleurisy, or Plastic Exudation within the Pleura." The author, Dr. Leaming, shows that this condition is even more common than would be supposed from autopsies, notwithstanding the frequency with which the results are found post mortem, "reabsorption so speedily taking place that no adhesions remain"; also, that about two-thirds of the cases of phthisis seen in clinical practice commence with or after adhesions. Then follows a very exhaustive historical record of various views, writings, and traditions regarding Sneezing, by the assistant editor. Dr. Charles S. Bull contributes "Syphilitic Iritis and its Complications," in which he adverts to the peculiarly unfavourable course which syphilitic iritis seems to run when it occurs in negroes. The valuable communication, by Dr. Brown-Séquard, "On the Mechanism of Production of Symptoms of Diseases of the Brain," is continued—a series of twelve propositions being laid down defining the relationship between symptoms and lesions of the brain. This number of the Archives contains a review of the works on surgery recently published by Erichsen and Bryant, and reproduced in America.

Critiques and Addresses. By THOMAS HENRY HUXLEY, LL.D., F.R.S. London: Macmillan. 1872.—These critiques and addresses have already appeared at different times. They are now gathered together in one volume. They deal chiefly with educational, scientific, and philosophical subjects; and indicate, as their author says, the high-water mark of the various tides of occupation by which he has been carried along since the beginning of the year 1870. The first two papers are more or less political, and deal with the question of public education; the third forms the very practical address delivered by Prof. Huxley to the students of the Faculty of Medicine in University College in May, 1870, to which we directed our readers' attention at the time; and the remaining papers are scientific or philosophical. Any contribution bearing Professor Huxley's name is sure to be read with avidity as soon as it makes its appearance; and these papers will well repay a second reading, while some of them require to be studied rather than read. We know very few writers who possess the faculty of writing more vigorously, tersely, and well than Huxley. He is especially happy in his use of illustrations; they really do illustrate what he is writing or talking about.

A Manual of Palæontology, for the use of Students; with a general Introduction on the Principles of Palæontology. By HENRY ALLEYNE NICHOLSON, M.D., D.Sc., &c. Edinburgh and London: William Blackwood and Sons. 1872.—We can recommend this work to the student of geology, and to all desirous of grasping the leading principles and facts of palæontology. The general introduction is interesting and clearly written. The information throughout the book is well arranged, and it seems to us to have been well sifted before being put together. The work is moreover exceedingly well illustrated, and furnished with a good glossary and index. The author may be congratulated on having published, in addition to the present Manual, several other capital text-books of zoology and geology.

Hospital Hygiene. Being the Annual Address to the Southampton Medical Society, 1872. By CHARLES LANGSTAFF, M.D., M.R.C.S.E., President, Surgeon to the Royal South Hants Infirmary, &c. London: J. and A. Churchill. 1872.—This is a small book of little over forty pages, comprising enough to interest, and not too much to weary. It is from the very fact of its brevity little more than a contribution to hospital hygiene, but the author produces therein a plan for rendering wood non-absorbent, a "newest ventilating apparatus," and an open, or rather opening, locker for hospital use. An accurate description of these appliances would absorb into our pages a large proportion of the book, so we are content to recommend it to present and future medical officers of health as a very useful addition to the science of hygiene, as enunciated at the present day.

Mélanges de Pathologie Comparée et de la Teratologie. Par O. LARCHER. Fasc. 1. pp. 48. Paris: P. Asselin. 1873.—This little pamphlet contains the following articles:—(1) An Account of certain Anomalies of the External Ear observed in the Rabbit; (2) A Note to Aid in the Explanation of the Deformity termed Pygomelia in Birds, in which there are Supernumerary Hind Limbs and Pelvis, which is accompanied by two well-drawn plates; (3) A Memoir on Deformities of the Beak in Birds; and lastly, a note on a case of Dropsy of the Gall-bladder in Birds.

YAWS, OR FRAMBŒSIA.*

CONSIDERING how prevalent yaws has been in certain of our colonial possessions, it is strange that so little definite information relative to its nature and causation has been obtained. At one time, when slavery was rife, it was so prevalent in the West India Colonies that almost every sugar estate and cattle pen had its own yaws house for the reception and treatment of the negroes attacked by it. Had the local medical men enjoyed the opportunity of studying the disease, no doubt our knowledge of it would have been greater than it is; but, in fact, the sufferers from it were left to the tender mercies of old negresses styled

* Report on Leprosy and Yaws in the West Indies, addressed to the Secretary of State for the Colonies. By Gavin Milroy, M.D., F.R.C.P. Parliamentary Paper. March, 1873.

Certain unpublished papers prepared by Dr. Bowerbank at the request of Dr. Tilbury Fox, and furnishing an account of the history, origin, and progress of Yaws in Jamaica, and referred to by Dr. Milroy.

Article "Yaws" in Dr. Fox's work Skin Diseases, &c. Third Edition. Renshaw. January, 1873.

"yaws grandies," who, as Dr. Milroy observes, "were universally believed to know much better how to treat it than the 'Buckra doctors.'" Hence our ignorance of the disease. The papers and article quoted in the footnote, however, give us a body of important data touching the nature and progress of yaws or *framboesia*, *pian*, or *mycosis*, as it is oftentimes severally called.

Dr. Milroy, in his recent visit to the West Indies, saw a good many cases, and especially in Dominica. He particularly calls attention to the deplorable hygienic conditions under which those amongst whom yaws occurs exist, the destitute state of their surroundings, and the depraved and deficient diet upon which they live. Such conditions, all agree, predispose to the occurrence of yaws. It would appear that few white people are subject to the disease, which is almost exclusively confined to the African races. When whites suffer from the malady, it is generally held that they get it from unnecessary contact with the diseased. Yaws is mostly found in out-of-the-way districts destitute of proper medical supervision.

The disease, in the words of Dr. Bowerbank, whose authority on this subject is unequalled, is apparently "a distinct and specific disease *sui generis*, in no way allied to syphilis, leprosy, scrofula, or any other cachectic disease"; and Dr. Imray, of Dominica, in a "Memoir on Yaws," full of important information, and printed in the Appendix to Dr. Milroy's report, takes the same view; whilst Dr. Milroy coincides with this now generally received opinion.

The disease seems to develop without much, if any, constitutional disturbance, by the appearance, in the first instance, of an eruption of papulæ, varying in number in different cases, and often in successive crops, and in different parts of the body. This eruption of papulæ seems at times to be preceded by "the skin, especially of a black or dark-coloured person, becoming dry and harsh, mottled, or parti-coloured—i.e., patches of brown and black mixed together—and covered with a fine white branny scurf, especially about the forehead, the neck, chest, forearms and legs, the wrists and ankles, giving these parts very much the appearance of having been dusted over with flour. This condition is known among the natives as 'Yaws cacca.' It may cover the whole body, or be confined chiefly to the parts mentioned. Its duration is uncertain, lasting from seven to ten or twelve days, then disappearing, or continuing till the first crop of yaws is completed; then declining, to return with each successive crop. In some cases it lasts more or less throughout the entire duration of the disease. With this cutaneous symptom there is very generally more or less constitutional irritation, accompanied often with severe aching pains in the joints and limbs. These symptoms precede or usher in the appearance of small flat spots, patches, or blotches of a brownish or dark red-coloured efflorescence" (Bowerbank).

The papulæ before spoken of, however, enlarge till they attain the size of a pea, and may look like globules of pus; then about this time the cuticle bursts, and a small ulcer is formed, which rapidly fungates and gives exit to a thin fetid fluid. The growths, or yaws, are usually separate and distinct, but may be grouped together, and vary in size from that of a pin's head to a patch one or two inches in diameter. Intermediate stages are observable. The appearance of the growth may resemble a strawberry; hence the term "framboesia," the word "yaw" indicating the same thing. There are various other names: if the yaws are small and round like a grain of guinea-corn, the disease is termed "guinea-corn yaw"; if œdematous, "watery"; if it encircles a healthy piece of skin, "ringworm yaw," &c. Other common terms are those applied to individual yaw growths that reach a great size—viz., "maman pian," "mama," "modder," "mother," "fader," "master," or "grandy." The large growths do not themselves ulcerate, but they shrink away, and give place to ulcers. The largest growths form on the lips, pudenda, perineum, anus, and toes. Many of the papulæ of the early eruption also abort. The typical yaws, according to Dr. Bowerbank, is "the size of a raspberry—round or oval, reddish or pinkish, and firm in consistence."

The commonest seats of eruption are the face, neck, upper and lower limbs, and the genital parts. Yaws leave behind only dark marks, unless ulcerations have occurred, and then scars. It is said that if yaws does not properly develop, the patient may become cachectic, but more information is needed upon this point. The duration of the disease varies: under appropriate treatment, and especially a cleanly *régime*, it will tend to get well in from two to four months; it may last otherwise for years. The general health only suffers in the long continuance of the disease from the pain and ulceration that attend it.

Unquestionably the disease is inoculable, and it may spread from person to person, from simple wounds and abrasions becoming infected by the discharge from yaw sores. It is questionable if the disease can be conveyed except by "downright personal contact" (Bowerbank) of the infected with the non-infected. Sex makes no difference.

The treatment consists in the exhibition of *tisanes* of various woods, with the view of promoting the eruption, followed by the internal exhibition of mercury (which is the active ingredient of the legion of yaw specifics in use abroad), pushed to a moderate amount and conjoined with the use of good diet, scrupulous cleanliness, and the local application of a carbolic acid lotion or weak nitrate of mercury ointment.

So far as the above description goes, it gives our readers a fairly intelligible account of the main features of the disease, and Dr. FOX, in the article mentioned at the foot, gives additional particulars, which may easily be referred to. But more observation is needed with regard to the actual cause and the mode of dissemination of yaws amongst populations infected by the disease; and now that attention is specially called to the subject, we hope observers will turn their attention to its study. Lastly, it strikes us as very undesirable to exhibit mercury, except upon a very urgent need, for a disease which is so closely connected with all that is defective in the nutrition and personal sanitation of those attacked by it.

The Lancet Special Report
ON
ANÆSTHETICS AND ANÆSTHESIA.

(Second Series.)

I.—ADMINISTRATION OF ANÆSTHETICS.

SINCE the introduction of anæsthesia as a branch of practice, nothing has afforded finer scope for the exercise of constructive skill than the invention of methods for the administering of anæsthetic substances. At first no formal instruments were used for administration; the fluid was poured upon a sponge or into the fold of a napkin, and the fabric thus charged was applied to the nose and mouth. Chloroform was administered originally in this way (on a napkin) by Professor Simpson, and he to the end of his life continued a similar simple practice. Soon after experiments with anæsthetics were made in England, various mechanical contrivances were introduced to supersede the original method; and first amongst these was the double-valve mouth-piece invented by Dr. Sibson. Dr. Sibson hardly receives the credit that is rightly attached to his labours in the early days of anæsthetic discovery. He was one of the first and ablest of experimental investigators, and the double-valve mouth-piece he constructed was so simple and so effective that it has formed part of almost every modification of inhaler that has, from time to time, since been brought out. It consists of a mouth-piece made of soft lead-sheeting covered with leather, and so ductile that it can with ease be adapted closely to the nostrils and mouth. It has an inspiratory valve opening from the chamber or bag holding the chloroform, and an expiratory valve through which the expired breath of the patient passes into the outer air. It is easily adaptable, by means of an india-rubber tube, to any apparatus for holding the narcotic fluid.

The introduction of inhalers was intended at first for two objects: to economise the anæsthetic fluid used; and to

equalise the diffusion of the anæsthetic vapour, so that a limited and approximately known quantity might be employed in each case of administration. Sibson's double-valved instrument helped to secure both these objects; it allowed a limited quantity of vapour to be inspired, and it prevented the expired breath of the patient from carrying off vapour from the reservoir in which the fluid was contained. Ultimately, the question of economy became secondary to that of supposed accuracy of method by the artificial, as distinct from the original and simple plan of the sponge or the napkin.

So soon as the element of mortality from the use of general anæsthetics came into consideration, Snow raised the question of method of administration into foremost position by his attempts to prove that the danger of death was in proportion to the amount of vapour permitted to diffuse into the lungs. In respect to chloroform, he contended that from 4 to 5 per cent. of its vapour in the air inspired was amply sufficient for the production of the deepest anæsthesia the surgeon could ever desire, and that an atmosphere charged beyond the amount named was not only unnecessary but dangerous. Acting on this belief, a belief he enforced with so much zeal as to obtain for it a large and enthusiastic following, he constructed various instruments for correctly admixing the vapour of chloroform with common air, using in every case Sibson's mouth-piece with the double valve already described. That he might, as he thought, obtain absolute results, Snow invented, in 1848, a balloon or bag, which he could charge with a given mixture of vapour and air. This bag, fully charged for an operation, was the reservoir or store of vapour, and inasmuch as the mouth-piece directed the currents of vapour so that the atmosphere inspired came out of the bag, while the breath expired passed into the open air, the means for correct measurement of percentage of vapour seemed complete. Snow's own description of this method of administration, published at page 80 of his work on "Chloroform and other Anæsthetics," is worthy of notice in full, since it condenses the argument he so firmly, and for a time successfully, maintained. He says:—

"The most exact way in which it is practicable to exhibit chloroform to a patient about to undergo a surgical operation is to introduce a measured quantity into a bag or balloon of known size, then to fill it up by means of the bellows, and allow the patient to inhale from it, the expired air being prevented returning into the balloon by one of the valves of the face-piece to which it is attached. I tried this plan in a few cases in 1849 with so much chloroform in the balloon as produced 4 per cent. of chloroform in proportion to the air. The effects were extremely uniform, the patients becoming insensible in three or four minutes, according to the greater or lesser freedom of respiration, and the vapour was easily breathed, owing to its being so equally mixed with air."

In urging the claims of this method of administration of narcotic vapours, Snow used as an illustrative argument the natural admixture by fixed proportion of oxygen in air. "Nature," he submits, "supplies but one mixture of diluted oxygen from which each creature draws as much as it requires, and so, in causing narcotism by inhalation, if a proper mixture of air and vapour is supplied, each patient will gradually inhale the requisite quantity of the latter to cause insensibility, according to his strength."

For many years after the expression of this opinion Snow had a large majority in his favour, and the success which attended him in his administration greatly increased the reputation of his method. He gave up the use of the bag because of its inconvenience, and used in place of it a small metallic reservoir for receiving the chloroform, so planned, according to his estimate, that it, too, when properly used, limited the proportion of vapour chloroform to 4 or at most 4½ per cent. These inhalers were for a few years in very general use in English practice, and so sincerely was the percentage system of administration enforced that, in a trial for malapraxis brought against an administrator of chloroform, one of the grievances introduced by the learned counsel for the prosecution was that the chloroform was not given with due provision for limiting its amount during administration.

In the meantime two powerful influences continued at work to prevent the theory and the practice founded upon it from obtaining complete establishment. In the first place, the practice was never admitted by the distinguished man who had most to gain from any process that should make the administration of chloroform safe and sure; we mean Sir James Simpson. Sir James, to the last, held to his original plan of putting the chloroform on a folded napkin; and, what is more, he maintained that the quicker the administration of the vapour the greater the safety of the patient. He utterly ignored the percentage theory, denounced inhalers as mechanical contrivances for terrifying patients, and adduced, from the experience derived from practice in Edinburgh, where his plan was followed, that the results were parallel in success, in every particular, with any that could be brought forward from other modes of administration. The many pupils of Simpson naturally espoused his views, and thus there was a living opposition to the artificial plan which held its ground resolutely. But the second and more potent argument against the percentage theory was the fact of results from it. No one assumed that the simpler method was free from danger after the first death from chloroform had occurred, but most believed that the artificial method would produce safety. Unhappily, this hope fell, as death upon death, in cases where skilfully constructed inhalers were employed, became recorded in current literature.

Thus we have progressed until the present time, when there are still two classes of administrators—one holding by artificial methods of administering, the other holding by mere observance of the symptoms produced by the agent administered, and using the simplest of appliances—a towel, or sponge, a fold of lint on oiled silk, or a mask of domette, in the manner suggested by Dr. Skinner, of Liverpool.

For chloroform we have no hesitation in saying that the simplest instrument, for those who prefer Simpson's method of administration, is Skinner's domette mask, and for those who prefer Snow's method Sibson's double-valved face-piece, with Sansom's small inhaler. For methylene bichloride a simple form of inhaler is necessary, owing to the great volatility of the fluid, not for the purpose of measuring out the vapour, but for the sake of economy. The inhaler invented by Randall, which consists simply of a leathern mask, perforated at the bottom with small holes, and lined with a flannel bag, is excellent in action, especially when very quick narcotism is required. For the same agent Junker's inhaler is also good and exceedingly economical. This inhaler consists of a vulcanite double-valved face-piece connected with a little Wolf's bottle for holding the liquid. By means of a small pair of hand-bellows attached to the long tube of the bottle the vapour is steadily driven over into the mouth-piece by the short or exit-tube of the bottle, and the supply can be governed with great facility. Mr. Spencer Wells adopts this method of administration of methylene in all his operations of ovariotomy.

There are certain specially required apparatus for the administration of ether and of the narcotic gases, to which we shall refer in the sequel. Before we notice these it will be well to rest for a moment to consider whether there are, or are not, advantages in adopting an artificial method of administration in the case of the heavier methyl series, such as methylene bichloride, chloroform, and tetrachloride of carbon. Of these a reference to chloroform will serve for all, because it is the most commonly applied agent, and is intermediate in respect to its physical properties.

NOTES ON PROVINCIAL HOSPITALS.

THE SOUTH STAFFORDSHIRE HOSPITAL, WOLVERHAMPTON.

THIS hospital, which was commenced about twenty-five years ago, has recently undergone extensive alterations. Additional wards for fever patients and for accidents have been erected, and the out-patient department removed to a new one-storey wing, so that it is now separated entirely from the infirmary portion of the hospital. The whole building shows evidences of careful and well-considered rearrangement, and reflects credit on the architect, Mr. G. Bidlake, of Wolverhampton.

The town of Wolverhampton has now a hospital capable of accommodating upwards of two hundred patients in a building which, for completeness and good organisation, is

not to be surpassed by any institution of the same kind in the Midland Counties.

The new accident wards, two in number, are eighty feet by twenty-six feet six inches. They have two central fireplaces, and ample lighting and ventilation; the baths and lavatories are placed in an angular turret at the extremity of the wards, but separated from them by a short passage. Each ward has twenty-four beds, and has been fitted up by the munificence of various friends of the charity in a style too rarely seen in hospitals. There are four handsome sofas in each ward, a marble-topped table, comfortable oak cupboards to hold splints, and other appliances in the centre of the ward; and beside each patient's bed convenient receptacles to contain the patients' clothes, &c., and many other little arrangements which show that more than ordinary liberality has been exhibited in providing for the wants of the inmates.

A nurse's room overlooks each ward, and adjacent to it is a small private room capable of receiving one or two special cases.

The old accident ward has been converted into a children's ward, with twenty-four beds, and it has, what all children's wards should have, a good-sized day room adjoining it, in which the convalescent children may play without disturbing those who are confined to their beds.

The operating theatre has been remodeled, and the lighting improved by the addition of ample roof and lateral windows. At the opposite end of the building to the accident department are the new infectious wards, six in number, three on the ground and three on the first floor, and each intended for three beds. There is no direct communication with the main building. The floors are of polished oak, and the walls plastered with parian cement. Gas is laid on to all the wards and corridors, and the heating is effected by newly-arranged hot-water apparatus. The walls of the closets are of enamelled tiles, and the lavatories have spring basins and a liberal supply of hot and cold water.

The new out-patient department is reached by an extension from the central corridor of the hospital. It comprises a large waiting-hall with physicians' consulting and private rooms on the left, and similar rooms for the surgeons on the right; a dressing room, roof-lighted and provided with four basins, which, however, seems rather small for the size of the building and for its surgical requirements; and a dispensary, also roof-lighted and conveniently arranged with a laboratory adjoining and a drug-store in the basement. The dispensary has three windows opening into the waiting-hall, so that the out-patients, who number from 100 to 200 daily, may obtain their medicines readily and without crushing or inconvenience.

There is a small "amputation" ward, containing four beds, close to the out-patient rooms, and in this patients are kept for the first week after they have been admitted into the hospital and subjected to amputation; and also a "burn" ward, capable of accommodating six patients; and this again is separate from the main part of the hospital.

There have been further alterations in the nurses' rooms and in the general ventilation and lighting of the wards. The cost of this entire and very well-executed reconstruction of the hospital is £13,600, and that sum has been subscribed already by the liberal offerings of the people of Wolverhampton.

Foreign Gleanings.

CASE OF TUBERCULOSIS OF THE SKIN.

DR. BIZZOZERO of Turin records (in *Centralbl. für die Med. Wissensch.*, No. 19, 1873) a case of the above in a child of fifteen, with a marked scrofulous habit. At the post-mortem the following lesions were found:—Tuberculosis of the lungs, with peribronchitis; intestinal tuberculosis with large ulcerated patches, and a great many ulcers on the skin, especially at the elbows, the right half of the face, and the left shoulder. These ulcers did not extend beyond two centimetres in diameter. On examination with the microscope, the edges and fundus of the sores were found infiltrated with migratory globules, and there was granular destruction of the more superficial layers. Moreover, the existence of isolated tubercles was stated in the fundus and on the edges of the sores, as also in the portions of skin around them. They consisted in giant cells, with parietal nuclei. In the subcutaneous cellular tissue beneath the ulcers were found small gatherings of tubercles, which were quite perceptible to the touch through the tegument. Dr. Bizzozero thinks it very likely that scrofulous ulcers of the skin often have a tubercular origin.

TRIMETHYLAMIN IN RHEUMATISM.

Dr. Dujardin-Beaumetz draws the following conclusions from a further series of experiments on the above:—1. The origin of trimethylamin does not seem to modify its physiological action; whether taken from red-herring brine or from human urine, or artificially composed, its physiological action always seems to be the same. 2. The medicament diminishes the secretion of urea. 3. Therapeutically, it acts in a most marked manner in acute articular rheumatism, and gives better results than all other methods advocated until now, and that without producing any accidents or serious disturbance.

INFANTILE PARALYSIS.

Dr. Kitli (*Jahrbuch für Kinderheilk.*, 6 Jahrg. 2 Heft, 1873,) has taken up and continued the researches made by MM. Ellischer and Bouchut, and has found in infantile paralysis the existence of fatty degeneration and of a sort of vitreous degeneration of the diseased muscles, accompanied by cellular proliferation and multiplication of nuclei. Arguing that, in the first place, this kind of degeneration is never observed in paralysis due to lesions of the nervous centres (apoplexy, tumours, inflammation, &c.), but constantly supervenes, after a short time, in paralysis of peripheric origin, and is attended by speedy loss of contractility on faradisation, though contractility on continuous currents is retained for some months; and that, in the second place, post-mortem examinations have never shown any lesions of the spinal cord,—Dr. Kitli arrives at the conclusion that infantile paralysis is an idiopathic muscular affection. It is the affection which Dr. Bouchut designates by the name of "rheumatic and granulo-fatty paralysis," and, when limited to a muscle or group of muscles, by the name of "granulo-fatty myositis." The author insists on the fact that recovery is the rule when continuous currents have been applied from the outset of the disease. As to coma, convulsions, and other accompanying head symptoms, he thinks that they depend on a cerebral affection having the same cause as the muscular affection, but not in the least producing the latter. Moreover, no disturbance has ever been observed in the genito-urinary apparatus.

CASE OF APHTHOUS STOMATITIS COMMUNICATED BY A COW.

This interesting case was related by Dr. Hérent to the Société Médicale de Bruxelles, and recorded in a recent number of *Le Scalpel*. The patient was a farmer, aged fifty. On the 26th October he went to church after drinking a cup of milk taken from a cow affected with aphthous stomatitis. His symptoms supervened in the following order:—Giddiness, colic, vomiting, diarrhœa, enlargement of face, sore-throat, cough, salivation, hoarseness, fever, and hallucination. The mucous membrane of the gums and lips became covered with aphthous patches, some of which ulcerated. Certain parts of the feet and hands, the bursæ and penis, and the elbows were covered with large bullæ. The treatment consisted in strong doses of opium and alum collutoria, and the patient recovered only on the 6th Nov. No medication was adopted for the skin lesions, which healed up of themselves, the bullæ falling off in epidermic flaps.

CONTAGIOUS CHARACTER OF MEASLES.

Dr. Lancereaux has concluded, from the observation of a great number of cases, that measles is contagious during its stage of invasion, and that its power of transmission is then most intense. The contagious agent must have its source in the mucous membrane of the eyelids, the nostril, or the bronchi, since they are the only parts affected during that period. The period of incubation varies from nine to twelve days. It is therefore necessary to isolate patients from the moment the existence of measles is suspected.—*L'Union Médicale.*

THE LANCET.

LONDON: SATURDAY, JUNE 21, 1873.

WHATEVER the financial result may be, undoubtedly the demonstration which last Sunday's proceedings afforded of the practicability of inducing combined action in the cause of charity among the leaders and representatives of the numerous religious bodies to be found in London, was a great success. All credit, then, to those who, refusing to believe in failure, have within the space of a few months created an organisation which has worked so effectively as to secure a co-operation extensive enough to be fairly representative as a beginning. With perhaps two or three exceptions in which the regard for dogma seemed to have undue possession of the preacher's mind considering the occasion, we conceive that the clergy and ministers generally made good use of their opportunity; and that it is not their fault if the great lesson of the day did not make the deep impression on their hearers which it ought to have done. "It was a noble idea," said the Archbishop of YORK in Westminster Abbey, "to give one of GOD'S holy days to thought for GOD'S afflicted children." Canon PROTHERO in the same building dwelt eloquently on this aspect of the day, and drew a picture of the work done by the London hospitals, which should have moved his hearers to a liberal response. "What is wanted for our hospitals," said the Rev. DANIEL MOORE, "is that they should be supported upon a plan, that there should be some periodically recurring troubling of the waters of national benevolence—in a word, that a field-day should be allotted from among the Sundays of the Christian year when every congregation should be reminded of the obligation to bear one another's burdens and to feel for one another's woes." We might quote from many other addresses passages of similar import, as showing how strongly the thought of the common bond of sympathy that day evoked was present to the minds of the speakers.

Then as to the claims of the hospitals upon the public, we cannot doubt that such discourses as the one delivered by the Rev. H. R. HAWEIS to his congregation in Marylebone will greatly tend to awaken a wider interest in such institutions. Mr. HAWEIS did especially good service by pointing out the obligations which the hospitals conferred upon the community in affording the means whereby the medical art was perfected to a degree which would be unattainable from private practice alone—a consideration which obviously affects every individual in the kingdom directly or indirectly. Dr. ALLON, of Islington, rightly sees that Hospital Sunday has an important bearing upon the relation between the richer and poorer classes: the strongest counteraction to communistic and revolutionary ideas is brotherly help and sympathy; and, said Dr. ALLON, "few things would give a greater impetus and bitterness to anti-social communism than a careless response to this appeal, while few things would touch more deeply the hearts of the poorer classes than a signal generosity." The prompt and willing aid sent from England to the sufferers by the Chicago fire has done more to create a cordial feeling on the part of the people of America towards this country than a century of statesmanship and diplomacy could accomplish.

Turning now from the preachers, who, as we think, may be said to have well done their part towards making the first Metropolitan Hospital Sunday a success, we may glance for a moment at the manner in which the public did theirs. We do not attempt to gauge the probable amount to which the Fund will run up before it is closed on the 30th inst., and at the time we are writing only the most fragmentary and incomplete returns have come under our notice. Next week we shall be in a position to judge pretty fairly whether our "modest calculation" of £30,000 is likely to be nearer or further from the mark than the *Spectator's* £80,000, and we shall be most glad if our contemporary's estimate, rather than our own, should prove correct. As regards particular results, we must of course be prepared for anything between the extremes of liberality and parsimony. There were probably not far short of 10,000 people at the morning service in St. Paul's Cathedral, and the sum collected was £480; in the afternoon, with a congregation of course less numerous than at the first service, but anyhow exceeding probably 3000 or 4000, the unaccountably small sum of £26 was taken. At Westminster Abbey, three services, each attended by probably about 2000 persons, produced altogether £292. Some of the metropolitan churches responded right generously to the appeal: as, for example, Paddington parish church, St. Stephen's, Paddington, and St. Peter's, Eaton-square,—which yielded £351, £385, and £372 respectively. The Jews in their synagogues raised nearly £1000. The collection at the Temple Church amounted to the comparatively large sum of £344, the lawyers evidently being determined to show that any hitch which had occurred in reference to the use of their church for the collections was not chargeable upon them. In respect of the numerous congregations of secondary and inferior magnitude, allowance must be made for individual circumstances, and especially for the fact that the arrangements had to be made this year on such short notice.

The aggregate amount may yet be indefinitely augmented by the donations of individuals and of the City companies: Her Majesty the QUEEN, and the Prince and Princess of WALES, having set a gracious example to the former class by contributions of 100 guineas, £50, and £25; while the Drapers' Company have led the way on their side with 100 guineas, which, if emulated by the other eleven principal companies and the forty or fifty minor guilds, should produce a large sum. There is, therefore, ground for hope that the first Metropolitan Hospital Sunday will prove a financial success. Excuses may legitimately be made for the shortcomings of a first attempt; next year we shall look for something nearer perfection in London, and for the extension of the movement simultaneously throughout the whole country.

IT was, as is well known, in the pages of this journal that the great subject of the Adulteration of Food and Drink and of Drugs was first, and for a series of years, brought per-

sistently under the notice of the profession and the public. The scientific labour and responsibility, both very great, of these memorable Reports of the Analytical Sanitary Commission rested mainly on Dr. HASSALL; and some of the immediate results of these investigations were: first, to reveal the existence of almost universal and systematic adulteration in the classes of articles above enumerated; secondly, to occasion a vast diminution in the extent of adulteration, and a great improvement in its character; while, in the third place, these Reports afforded data for all the inquiries and legislation which have since taken place. Thus they led to the parliamentary inquiry under the presidency of the late Mr. SCHOLEFIELD, to the Adulteration Act of 1860, and to the more recent and, since the decision given in the case of FITZPATRICK v. KELLY, to what may be described as the much more effective Act of 1872. These were great achievements, purchased at the cost of great labour and immense responsibility; and we have just reason to be proud of them.

From the day when the first Reports of the Commission appeared in THE LANCET—namely in 1850,—we have never ceased to devote, under the same leadership, much time and attention to this great question. Much as has already been done, more remains to be accomplished; and we shall not consider that we have fully completed our purpose until, with others, we succeed in bringing about such alterations in the Adulteration of Food Act of 1872 as are necessary to render it as effective as possible, so that ere long the scandalous practice of adulteration, which has so long prevailed, shall become a thing of the past.

With a view to this result, two things are requisite: first, that the right and best mode of proceeding under the existing Act, to render it as workable and effective as possible, should be clearly made known; and, secondly, that the amendments required in the Act, to render its working more efficient, should be plainly defined. With reference to both these objects, Dr. HASSALL has recently drawn up two important documents; with the latter of which only we propose here to deal. In this the following practical suggestions and recommendations are made.

First, that the Act should contain certain clauses defining exactly what is embraced under the term "adulteration." Thus all articles should be deemed to be adulterated the composition of which is not expressed by the name under which they are sold. Butter should not be a mixture, as it often is, of various animal fats; nor coffee, a mixture of chicory and coffee; and every article to which any foreign matter or substance has been added for the purpose of gain or deception should be deemed to be adulterated. Again, articles from which any of the important constituents have been abstracted—as of cream from milk, or the active principles of tea from tea-leaves, &c.,—should be regarded as adulterated. Further, it would seem advisable that the Act should deal with articles of food rendered unfit for human consumption by reason of deterioration of quality arising from disease or decay. This division would embrace diseased and unsound meat, fish, fruit, and vegetables.

Secondly, a distinction should be made in the Act between certain sophistications, notoriously of foreign origin, and other adulterations. Thus it is well known that West India pickles, as imported, contain a great deal of copper; that the peas and beans, in tin cases, imported from France, also often contain a considerable quantity of the same metal; and that green and some other descriptions of tea from China are almost invariably artificially coloured and otherwise adulterated. Now, it seems only right and fair that these adulterations should be dealt with separately, and especially because it is hardly just to punish British shopkeepers for offences committed by foreigners abroad. If this recommendation were adopted, it would be necessary that the inspectors should have power to enter bonded warehouses, and to procure samples of tea &c. for examination. One great advantage of obtaining samples in the warehouses is, that they represent enormous quantities and bulks of goods; and that, in the event of adulteration being discovered, their distribution to the consumers and the injury resulting therefrom can be the more easily prevented.

Thirdly, that, since the adulterations detected are for the most part the work, not of the retailers, but of the makers and manufacturers, and the public cannot purchase samples from these manufacturers, power should be given the inspectors to enter all wholesale manufacturing establishments to obtain samples for analysis. This power has long been given the Excise inspectors, with a view to the protection of the revenue.

Fourthly, it is very desirable that the Act should require that spirits sold to consumers should contain not less than a certain percentage of spirit or alcohol; that there should, in fact, be consumers' standards of strength, as there are Excise standards, for spirits; and that their dilution with water should be deemed an adulteration. It is also a matter worthy of consideration whether some similar restriction should not apply to malt beverages, and perhaps vinegar.

Lastly, a change is urgently required in the machinery for obtaining samples for analysis. This duty is now remitted to certain public officers or inspectors, who are of course as well known as the parish church or pump. Now when these inspectors enter a shop the purpose of their visit is at once surmised, and if there be genuine articles therein they are sure to obtain them, and not the adulterated samples of which they were in search. It is difficult to imagine any machinery more calculated than this to defeat the object in view. The best and safest plan to pursue in the collection of samples is that so successfully adopted by THE LANCET. Two trustworthy but not generally known persons should make the purchases, one acting as witness of the other's proceedings. These persons should immediately, on making any purchases, and before entering another shop, place upon each sample the name of the shopkeeper, the price of the article, the date of the purchase, and their own names or initials. In this way mistake as to the identity of any article is rendered impossible.

An alteration is likewise required in the phraseology of certain clauses of the Act, and especially in Section 3, which implies the necessity of a guilty knowledge on the part of the seller.

If the various suggestions thus made were properly carried out in an amended Act, we would answer for its efficient

working, and the Act would then prove an immense boon, morally, socially, and pecuniarily, to the public, the honest trader, and the revenue.

WE are constantly receiving letters suggesting the formation of Sick Benefit Societies, showing the extent to which the want of these is felt by the profession. The problem to be solved is, however, by no means so free from difficulty as some of our correspondents appear to imagine, and as probably a great many others think. In the first place, there can be no doubt that, if anything is to be done in the way of sickness insurance, the profession must be prepared to establish a society which, as suggested by Dr. WOODWARD, must be exclusively medical, for we have not much hope that any of the first-class existing Life Insurance Offices—and the profession could not be advised by us to have anything to do with any but a first-class office—will be induced to start a branch for sickness insurance either for medical men or any other class. Many of them would, we suspect, be prohibited by their deeds of constitution from undertaking the kind of risks which sick pay would involve; while others not so restricted would, even if they were willing to make the experiment, find themselves confronted at the threshold by the grave difficulty of having to fix rates of premium upon data which, for aught they could foresee, might turn out to be utterly misleading. Then it is well known that Life Insurance Offices occasionally get defrauded by fictitious deaths, and we can easily understand that they might argue that the chances of improper claims being made for sick pay were much greater than the risk of imposition in respect of deaths. For these and other reasons we are satisfied that it is useless to look to existing Life Insurance Offices for help in what we, in common with our correspondents, feel to be a professional necessity. If we are all thoroughly in earnest about this matter, we may make up our minds at once that the only course open is to follow the example of the classes below us, and institute a Medical Sick Benefit Society on the mutual principle, so that every member might be personally concerned in its success.

Then we should have to face the question of premium and sick-pay rates, and we do not intend to disguise the fact that this would be a serious business. It would certainly not be the simple matter that some of our friends imagine. For example, in the absence of any knowledge of the liability to sickness among medical men, it is sometimes assumed that the sickness experience of Friendly Societies would form a basis upon which estimates might be made of premium and sick-pay rates applicable to a class like the medical profession. Mr. AKERMAN'S letter in THE LANCET of the 24th ult. takes this for granted, while he further assumes that all members under thirty-five years of age should pay a uniform premium rate, which would never do. Now the well-known actuary, Mr. NEISON, as the result of probably the most exhaustive analysis of the sickness and mortality in the Friendly and Benefit Societies that has ever been made, thus expresses his opinion relative to the applicability even to particular cases in the same class of data derived from the average experience of the whole class. Referring to a large Provident Society (located in an agricultural county, it may be said), in which, after twenty years' experience, the rate of sickness was found to exceed by upwards of 40 per cent. that of the average of all the Friendly Societies in England, Mr. NEISON says: "If, therefore, in constructing tables for such a society, or in estimating its liabilities, an actuary were to be guided by the rate for the whole kingdom, ... it is obvious that a most fatal error would be committed. The greatest care and judgment are constantly required, both in establishing Friendly Societies and in remodeling existing ones, to ascertain the precise rate of sickness peculiar to the circumstances of the case, as nothing could be more fallacious and contrary to all experience and correct observation than the application of a general rate of sickness indiscriminately to all societies." The same argument must hold good with greater force against making the sickness experience of the artisan classes who constitute the Friendly Societies the basis of any estimate of the sickness prevailing among so entirely different a class as medical men.

But then it may be urged that we are not absolutely in the dark respecting the liability of medical men to sickness, inasmuch as the average rate of mortality in the whole profession is known, and the rate of sickness is supposed to bear a constant relation to the rate of mortality. If the latter assumption were correct, we should indeed have a bit of tolerably firm ground to build upon; but Mr. NEISON opposes the weight of his experience to it, and shows that in many callings and trades a low rate of sickness is found to be associated with a high death-rate. Thus bakers, butchers, and tailors experience less than the average amount of sickness, while their rate of mortality is very high. And a comparison of the general results of mortality and sickness among Friendly Societies in England with those in Scotland shows that "while the excess of mortality is uniformly against Scotland, the excess of sickness is as constantly against England." In the face of such statements as these, coming as they do from unquestionable authority, it must be obvious that it would be a bold step to lay down scales of premium for sick pay upon the basis of the professional death-rate alone. The hypothesis of a constant relation between sickness and mortality was propounded by an eminent actuary, Mr. EDMONDS, and it is quite likely that, taking the whole population *en masse*, it would be found to hold good; but that is a very different thing from its applicability to a particular class or section of that population such as the medical profession. Dr. FARR, by applying that hypothesis to the whole population, gave in the Registrar-General's Twelfth Report a table of premiums at different ages for sick pay without regard to class distinctions; but so long as the relation of sickness to mortality among medical men remains an unknown quantity, we do not see how such a table could safely be used, except on one condition—namely, that supposing a Medical Benefit Society were started, the premium rates should be fixed high to begin with, and should be subject to revision at the end of a term or terms of years in accordance with the Society's experience.

There are other points of difficulty than those we have touched upon, not the least of which would be a generally acceptable definition of sickness in the sense of carrying sick pay. We do not say that any of these difficulties are insuperable; but they exist, they are probably not much

understood, and they would have to be surmounted before the Society could be established on a reasonably firm basis.

OUR contemporary, the *Pall Mall Gazette*, which has always taken a deep interest in the question of medical attendance on the working classes, returns to the subject in an article on the Treatment of Out-patients at the London Hospitals and Dispensaries. It is true that it goes over old ground, consisting largely of allusion to our own description two or three years ago of the utterly discreditable and unsatisfactory way in which promiscuous crowds of out-patients are "knocked off" at the hospitals, especially at St. Bartholomew's and the Royal Free Hospitals. It would seem that our description of the state of matters there is still only too true. It is simply disgraceful that at a hospital like St. Bartholomew's, burdened with wealth, the out-patient department should be conducted in a way almost demoralising to the patients and the students.

After quoting our account of 1869, to the effect that on a busy day 120 patients were seen and dismissed in an hour and ten minutes, or at the rate of thirty-five seconds each, our contemporary describes the slight change that has been made to remedy this state of things, apparently more from a hope of stilling public criticism than from a sense of what is really becoming in a great school and in an old institution of enormous wealth. This change, as our readers know, consists of the addition of three members to the staff, under the flattering title of "Casualty Physicians." Such a change is of course quite inadequate to anything like a right "seeing" of out-patients. Accordingly all the essential evils which our Commissioner described in 1869 continue in 1873. Patients are admitted to the number of a dozen or a score at once, to see each other examined and hear each other questioned about their complaints, than which few things are more painful to those who have any sense of proper delicacy, whether men or women. This is true even of patients with perfectly innocent complaints. How much more so when respectable and virtuous people are jostled together with those whose diseases are neither virtuous nor respectable—when a youth with phthisis has to wait his turn till one with chancres and buboes has been overhauled. How are out-patients to be affected by such treatment, excepting in the way of being made coarser? We lately heard a medical man suggest, as the cure for all evils of medical charities, that charity should be made "disagreeable." This seems to be the underlying principle of the St. Bartholomew's arrangements. But we cannot say much for its good effects. If it is demoralising and inhuman to the patients, what shall we say of its effects on the students? To see men, women, and children prescribed for in groups, at the rate of two in a minute, is a sight that must have a bad effect on two students out of three. It must distinctly help to make them bad practitioners, to teach them carelessness in diagnosing disease and in prescribing for it, and to make them less sensitive to the feelings of their patients than any medical man has a right to be.

But we have not exhausted the parties injured by such disgraceful arrangements. The assistant-physicians are injured, physically and morally, by it. They are exhausted before half the work is done, and it is simply impossible that anything like a correct opinion can be formed of the nature of the cases.

Our contemporary thinks the time has come for a sweeping reform. The time has more than come. The appointment of three casualty physicians to remove the great scandal which we exposed in 1869 is a proof of what we may expect from the great hospitals themselves, especially those with large endowments. Public exposure and public opinion are the only influences that will have any effect, and these only by persistence. We are not of the number of those who think that the "Out-patient Department" can be abolished, or that it should be. In London especially there must be a great multitude to whom, if properly conducted, it would be a great boon. But this proper administration is conspicuous by its absence. For the sake of the patients, of the students, and of the physicians the work ought to be done well and thoroughly. We agree with our contemporary that either the crowd of patients must be diminished or the staff of physicians increased. Probably both of these measures will be necessary to make the system helpful to the poor and to the cause of medical education, as it was designed to be.

Medical Annotations.

"Ne quid nimis."

ARMY MEDICAL SERVICE.

IF we may judge from the experience of previous years, we may expect that a competitive examination for the medical service of the British army will be held about August next. It seems to us fitting, therefore, that we should make a few remarks on the present condition of that service, and frankly express our opinion as to the course to be adopted by the younger members of the medical profession, if they desire to witness its improvement in the future. We frequently read paragraphs in the Irish press setting forth the remarkable success of young medical men educated in Ireland at these competitive examinations, and it is implied, if it be not actually expressed, that students from the Irish schools and universities altogether distance those coming from England and Scotland. Now, we make bold to say that nothing can be further from the truth. Of late years the competition has practically been between men coming from the former colleges, the candidates from Great Britain being relatively insignificant in number, and not, as a rule, composed of the *élite* of their medical schools. As an evidence of the correctness of our statement, we may say that out of some 670 names of medical officers we find that more than half are from Irish schools; and if any further proof be needed, let any one turn to the lists of successful candidates published of late years in which the nationalities are detailed. Far be it from us to institute any invidious comparisons between the respective attainments of the young medical men educated at the various hospitals of the three sections of the kingdom. There is the admixture of good, bad, and average men to be found at every medical school. What we do contend for, however, is this: that the army medical service fails to attract the best men of any school, and that the present condition of the service is largely, if not entirely, attributable to the facility with which the authorities have obtained the requisite supply from one section of the kingdom. And what is most extraordinary under the cir-

cumstances, no section of medical officers complain so much or so frequently as Irishmen, if we may judge from the very disproportionate number of communications we receive from them, of the treatment to which they allege they are subjected by the authorities. The whole matter turns on the commercial pivot of supply and demand. The Government offers such and such conditions. If these prove sufficient to attract the requisite number of candidates, it is perfectly clear that no amendment or amelioration of them can be anticipated. Of course, young medical men have to seek employment in the various channels open to them. If, however, they elect to compete for posts in the public service, they certainly have no right to grumble with the conditions as soon as they have entered upon them, nor can they justly hope to obtain much sympathy from anyone if they do. How is it possible to expect the authorities to pay any attention to the memorials emanating from Irish medical corporations, when the young men who hold their diplomas, and who ought to be the best judges as to the value to be put upon their own services, are always ready to come forward to compete for these appointments? We altogether put aside for the moment the adequacy or inadequacy of the terms, or the fairness or unfairness of the treatment offered to members of the army medical service. If the army obtains the requisite number of men the authorities, we may be sure, are perfectly satisfied with the results. It ought to be a popular service, and we contend that if things were properly managed it could easily be made so without pressing hardly upon the national exchequer. As things are at present, however, we hold that the best men keep aloof from the service, and that the competitive examinations are a farce if they are supposed to imply that the competition takes place between those best trained. Here and there the army obtains a thoroughly well-educated and able man, qualified to succeed in any post. Still a large number are simply veneered; they possess few solid attainments; and the outside polish that shines so much in competition is little better than a sham, for it only serves to conceal the absence of durable qualities beneath.

As touching the new Warrant, we will limit ourselves to one statement. There has been a grave breach of faith with all those who entered the medical service under the terms of the Warrant of 1858. We believe it to have been wrong in equity, if not in law, to have introduced a new ruling in regard to forage allowance which will distinctly deprive those officers of what they had a right to expect would be theirs on attaining certain ranks in the service. There is one way, and only one way, for the authorities to have acted in the case of the withdrawal of any privilege—it was to have provided some substitute of equivalent value to that which they had cancelled.

THE CLERGY AND THE HOSPITAL SUNDAY.

IT would be ungenerous not to recognise the services rendered to the metropolitan hospitals last Sunday by the clergy of the churches. It is true that all the clergy did not plead the sacred cause, and that some of them had no reasonable excuse for not doing so. These may safely be left to settle accounts with their congregations. We have heard of some who had to explain in terms more apologetic than convincing their not having a collection, and of others who, at the last moment and without having intimated the collection the previous Sunday, felt compelled by the pressure of their congregations to have a collection. We have heard, too, of a liberal man who, finding there was no collection in his own church, sent or took his money to a church where there was a collection. We are speaking of churches where there was no other collection on the 15th, and no valid excuse for not keeping Hospital Sunday. Certainly he will be both a bold and unwise clergyman who allows anything to prevent his having a collection next year. This year it was inevitable that not a few of the clergy should have sound excuses for not taking part in it, but next year all excusing will be set down, and rightly, to want of sympathy with the object. We owe a special acknowledgment, however, to those who have this year risen superior to all considerations of congregational and denominational convenience, and kept the 15th of June as a real "sabbath for man," without distinction of creed. It has been said that the clergy have not shown an appreciation of the real significance of the human and christian feeling to which, on the 15th instant, they were supposed to appeal. This is certainly not true of a considerable number of the appeals made, which were characterised by much breadth of feeling. It seemed as if even those who were narrowest in their creed were "widened" by contact with a theme that moved all London as scarcely anything else has moved it in the memory of the present generation, barring, of course, appeals in connexion with exceptional and romantic calamities like the siege of Paris, &c. We are sure that the ministers who pleaded so earnestly for the hospitals will have their reward. The churches will benefit only less, if less, than the hospitals. We shall only venture to make one suggestion to our reverend co-operators in this great matter—viz., that, the week before the next Hospital Sunday, they should spend a day or two in the hospitals and dispensaries of London and acquaint themselves in this clinical way with the work done in and by these institutions. Contact with the actual suffering which they try to relieve will give that practical character to their appeals which, without such experience, they can scarcely have.

DUBLIN SANITARY ASSOCIATION.

THIS Association held its first annual general meeting in the Leinster Lecture Hall, on Wednesday, the 11th inst., under the presidency of Lord James Butler. The chairman introduced the business by alluding to the fact that there is no chance for any sanitary legislation for Ireland this year, and congratulated himself on the postponement, as the Irish Bill would have shared all the defects of the English one, from which it was draughted. Contrasting the preparations now on foot to welcome the Shah with the lethargy exhibited in view of the arrival of another potentate from the East—King Cholera—Lord Butler concluded by urging on his audience the necessity of agitating for their hygienic rights—rights which the Government had done so little to recognise. From Dr. Todhunter's report, in the name of the executive committee, which was next read, it appears that the Association owes its origin to a few gentlemen who, in the May of 1872, met in conclave to consider means for the improvement of the sanitary condition of Dublin. From that date the Association has increased in numbers till it now includes 236 members, among whom are the representatives in Parliament both of Dublin county and University, one of the representatives of the city, and many of the leading citizens. The Poor-law medical officers of Dublin have been ex-officio admitted as members of the Association, while several distinguished names in hygienic science also figure on the list. The finances of the Association are flourishing, though much expenditure has been incurred for printing and circulating reports and other documents bearing on public health, with the view of creating an educated public opinion with reference to sanitary topics generally. The Association has been, ever since its establishment, in weekly communication with the Secretary of the Public Health Committee

of the Corporation, reporting on no fewer than 482 distinct sanitary nuisances within the city bounds. Redress cannot fail to follow the exposure of those grievances, and to be extended from Dublin to the other cities and large life centres. Three epidemics—fever, cholera, and small-pox, causing an aggregate mortality of 8896, and an immediate cost of some £70,000,—have roused the citizens of Dublin to energetic measures, and the Association has but to persevere to crown its enterprise with success. Resolutions in favour of its continued and extended action were introduced and seconded by speakers distinguished in legal and medical circles; while a weighty and effective appeal by Dr. Evory Kennedy to the enlightened sympathies of his audience concluded the business of the meeting. The Dublin Sanitary Association has begun well; its prospects are of the fairest augury, and its efforts will have the countenance and co-operation of all sanitarians throughout the country.

THE CASE OF MR. LUTWIDGE.

THE inquiry into the cause of Mr. Lutwidge's death terminated in a verdict of murder against William M'Kave. The particulars of the injuries sustained will be found in our last number. The case is in every sense very remarkable. M'Kave was a criminal lunatic, and was admitted into Fisherton House Asylum in 1852. Dr. James Wilkes, one of the Medical Commissioners in Lunacy, who had seen M'Kave at different times for eighteen years, said that he was certainly never looked upon as a dangerous patient, though he was always discontented and excitable, talking loudly and appealing for his discharge. He was committed for six weeks for breaking windows. It seems surprising that such an injury could be committed in so short a time and in the presence of several attendants. Mr. William Martin Coates was of opinion that no number of attendants could prevent such an accident. He maintained that criminal patients should not be sent to a private asylum, as there could not be the same amount of precaution as at Broadmoor. Dr. Finch said that, as a rule, criminal patients were not more dangerous than others.

We exceedingly regret to learn that the melancholy inquiry into the death of Mr. Lutwidge was made additionally painful by the behaviour of a gentleman who ought to have set a better example. The inquiry was conducted by the medical coroner for Salisbury, Dr. Edward Young. Having sworn the jury, Dr. Young very naturally and properly proceeded to state to them the nature of this most unusual case, and of the facts on which they had to give an opinion. Thereupon he was interrupted by Mr. Lee, a solicitor of the town, and town clerk, and told that his remarks to the jury were most irregular. The coroner contented himself at first with questioning the accuracy of that gentleman's views of a coroner's duty, but afterwards intimated with some decision that his further interference could not be permitted.

MILITIA SURGEONS.

As far as we can gather from information that has been furnished to us, it would appear that Mr. Cardwell has determined on practically superseding the militia surgeons, as far as recruiting is concerned, by the appointment of army surgeons to all the depôt centres which are in process of formation. The case appears to stand somewhat as follows. Under the new system of army organisation, the regular and reserve forces will be brought into closer connexion at the various depôt centres. The former must necessarily be provided with their own medical officers, on whom, in addition to taking care of the sick at the station, will devolve the duty of medically inspecting the recruits. In fact, the War Minister finds that he can dispense with the services of one set of medical officers in this respect. This duty has been hitherto performed, as far as their own corps were concerned, by the militia surgeons, and it formed the most, if not the only lucrative work connected with their appointments. The surgeons of militia will, we presume, in other respects remain as they were; but it may be fairly urged that their posts, when deprived of their fees for recruiting, will become valueless. It seems clear that no one would care to be a surgeon of militia for the purpose of being subjected to the grave inconveniences attending his presence annually with the corps when embodied during the training period. The whole body of medical officers of the army have striven might and main, on the other hand, to become more closely connected with the reserve, and this was, we believe, recommended by the present Director-General years ago. They represent, not unnaturally, that they possess the requisite training, that they have to encounter all the risks of foreign and war service, and that the militia afforded them the only chance of getting retirement or occupation in their own line at home. We have received at times numerous communications from both army medical and militia medical officers. The new system of depôt centres has forced this subject upon the attention of the War Office. It is felt that the services of the two sets of medical officers are not required, while the services of one must be retained. The militia surgeons, although they form by far the smaller body, naturally resist the loss of their incomes, and their opposition has no doubt defeated to a great extent the objects of the army surgeons, who will derive no benefit from having to discharge the duties of medically inspecting the recruits. The State, in reality, reaps all the financial benefit. Like the lawyer in the case of the disputants over the oyster, the State takes the oyster, and hands the shells to the medical officers. The inference is obvious—viz., that the State must recompense the militia surgeons for the loss of that which made their appointments of any real value.

"WRITERS' CRAMP."

IN the June number of the *Practitioner* is the first of a series of articles, by Dr. G. V. Poore, on the pathology and treatment of this disease. Dr. Poore does not believe that the phenomena of writers' cramp are due to any central change either of the brain or spinal cord, but ascribes them to a condition of irritable weakness of certain of the muscles used in writing. Writing, he points out, is a very complicated act, and is divisible into—(1) Pen-prehension; (2) stroke-making movements of the pen; (3) the movement of the hand along the paper; and (4) the poising of the hand (which in writing is kept about three parts prone, chiefly by the action of the supinators). Of these four acts, the muscles concerned in the first and last are kept in a state of contraction, often for inordinately long periods, and have not those "due intermediate intervals of repose" which are essential for healthy nutrition. As a result of this abuse of function a condition of irritable weakness is set up. The muscles concerned in pen-prehension are chiefly intrinsic muscles of the thumb and first two fingers, and when one or other of these muscles becomes weakened by excessive use, the patient is unable to take a steady grasp of the pen. He accordingly employs other muscles, generally the flexors of the fingers, which are normally used for stroke-making, for the purposes of pen-prehension, and has then to resort to some new method of stroke-making, by moving the arm, the shoulder, or the body. After a time, in bad cases, the new muscles of pen-prehension become tired out like their predecessors, and then the scrivener has to resort to some new plan (often a mechanical arrangement) of holding the pen. In

this way he explains the occasional progressive nature of the disease. The muscles most commonly at fault are notably those of the thumb and first finger, which are not, as a rule, affected with true paralysis or spasm, but are merely obstinate, and refuse to obey the mental stimulus. The supinators are often affected, and there is frequently a tendency for the hand to roll outwards or inwards, owing to the unsteady action of the supinators or their antagonists, or the patient is unable to write unless the whole forearm is supported and kept completely prone.

THE VISITATION OF EXAMINATIONS.

OUR readers will remember that at its late meeting the General Medical Council resolved so far to modify its custom in regard to visiting the examinations of the different licensing bodies as to associate with members of the Council a certain number of visitors unconnected with that body. The Executive Committee was empowered to appoint such visitors, and to make the necessary arrangements for the visitation of examinations by them conjointly with the members of the Council. In the discharge of this duty the Executive Committee met on Friday, the 13th inst., and appointed the following five gentlemen—viz., Dr. Andrew Whyte Barclay, Dr. John Syer Bristowe, Messrs. George Busk, Timothy Holmes, and Henry Power. These names will command the approval of the profession. But it occurs to us that an Irish and a Scotch independent visitor should have been appointed. What is wanted is international visitation, and at the same time the visitation of all examinations by the same persons, so that we may know what is the comparative stringency of the corresponding examinations of similar bodies. Hitherto Scotch members of the Council have visited Scotch bodies, English English, and Irish Irish, and the visitations have been open to the charge of being more complimentary than critical. It is now understood that, as far as possible, members of the Council will visit in other than their own division of the kingdom. In THE LANCET Medical Bill the appointment of perfectly independent inspectors of examinations was provided for. The present scheme is not so satisfactory, but it is an improvement upon the past system of visiting examinations. The bodies which will be visited this year are the Apothecaries' Society of London, the University of London, the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, the Royal College of Surgeons of Ireland, the Queen's University in Ireland. The visitors appointed by the Executive Committee will be paid for the discharge of the duties of visitation at the same rate as members of the Council for attendance at meetings of the General Medical Council—viz., five guineas per day, and travelling expenses.

THE SEWERS QUESTION IN LIVERPOOL.

THE borough engineer of Liverpool, Mr. Deacon, in a report on the state of the sewers of the borough, recently laid before the Health Committee of the Corporation, has frankly accepted the principles set forth as to their arrangement and ventilation by THE LANCET Sanitary Commissioner two years ago. He recommends, in short, first, that the sewers of Liverpool, where structurally defective, shall be altered in accordance with the principles of construction now most commonly accepted by engineers; and, next, that they shall be ventilated throughout the entire system after the manner adopted in the metropolis, and advocated by the engineers of the Local Government Board. His detailed recommendations affecting structural arrangements, such as mode of junction of branch sewers, trapping of gullies and the provision of catch-pits in them, modification of form of certain inverts, &c., have been accepted; but the important question of the mode of ventilation of the sewers still remains under consideration. On this latter question, unfortunately, Dr. Trench joins issue apparently with Mr. Deacon. It is to be regretted that this disagreement, if not indeed arising in some passing misapprehension at the time of the Health Committee's meeting, had not been dealt with, and that the two officers had not come to some common ground of agreement before Mr. Deacon's report was made public. The local papers report Dr. Trench as stating that the plan of sewer-ventilation adopted in London was disapproved by Mr. Rawlinson, and that it had not been successful. In answer to this statement, the borough engineer produced and read a long letter from Mr. Rawlinson, recapitulating his well-known opinions on the excellence of the London plan and its efficiency. The mode of ventilation of sewers adopted in London is, indeed, the mode accepted and recommended in the official "Suggestions" of the engineers of the Local Government Board. Liverpool, we believe, must sooner or later accept a plan of ventilation which has been found to work so well elsewhere, and for which no trustworthy substitute has as yet been found. We do not for a moment believe that Dr. Trench can seriously question the abundant evidence which exists on this point, and we imagine that, if his observations have been correctly reported, they must have resulted from some misapprehension. Indeed, the chairman of the meeting observed that he thought the opinions of Dr. Trench and Mr. Deacon harmonised more closely than their words seemed to convey.

BATHS AT THE EAST-END.

In cute curandâ plus æquo operata juventus, however true of the *jeunesse dorée* of ancient Rome, cannot certainly be applied to the denizens of East London. In that mighty hive of artisan life the means of personal ablution are practically non-existent, to the great detriment of a population huddled together in the frequent proportion of one family to each room. And yet it was not always so. Thirty years ago baths and washhouses at an almost nominal charge for use, were opened in Whitechapel, by some philanthropic persons. But somehow or other, the funds having fallen off, the baths and washhouses had to be closed, with the effect, not only of depriving men of a most healthful practice, but of driving them from their homes on washing and other days into taverns, where they either formed or confirmed habits of intemperance. At an influential meeting in the Egyptian Hall of the Mansion House on Saturday, the Right Hon. W. Cooper-Temple, who presided, urged the necessity of reopening these baths and washhouses, and dwelt on the great sanitary benefit that would accrue from them to the East London population. Canon Kingsley followed with an effective picture of what a Roman emperor would think if restored to life and placed in London, where baths used to abound under his *régime*. "The august ghost would be told that remains of these were still to be seen in some of our museums; but the humiliating admission would have to be made that only within the last few years could we boast of a few public baths of our own construction. It was highly probable that he would say, 'We Romans left London too soon. No doubt we, the barbarians, had no hospitals or reformatories in our time. But instead of spending money to cure people of disease after they have had it, and to restore people's self-respect after they have lost it, would it not be better so to spend money as by means of public cleanliness to prevent disease and the loss of self-respect?'" The ghost would receive no satisfactory response to this question, for

the best of all reasons, that none could be given. Let there be no delay then in restoring what pagan Rome established, and, now that the dog-star rages, in affording the artisan who lives by the sweat of his brow the opportunity of keeping his dwelling sweet and his body cool, without being driven to the tavern for relief from the discomfort entailed by the lack of those conditions.

CHEMICAL COMPOSITION OF THE GREY AND WHITE SUBSTANCE OF THE BRAIN.

DR. D. PETROWSKY has recently undertaken, at the instigation of Prof. Hoppe-Seyler, a series of comparative researches on the composition of the grey and white substances of the brain with the following results. One hundred grammes of the grey substance contain 81·6042 grammes of water and 18·3958 grammes of solids; whilst 100 grammes of white substance contain 68·3508 grammes of water and 31·6492 parts of solids. One hundred grammes of the dry solids contain in the case of the grey and white substances respectively:—

	Grey.		White.
Albuminous compounds and glutin	55·3733	...	24·7252
Lecithin	17·2402	...	9·9045
Cholesterin and fats	18·6845	...	51·9088
Cerebrin	0·5331	...	9·5472
Substances insoluble in pure ether...	6·7135	...	3·3421
Salts	1·4552	...	0·5719

The chief portion of the grey substance, therefore, is composed of water and albuminoid compounds. Cholesterin and the fats only form a quarter of the solids. In the white substance, on the other hand, the albuminoids are only one quarter of the solids, while the fats form one-half.

MORTALITY AFLOAT.

WE have frequently recurred to this subject for the purpose of recommending the adoption of some simple list of "causes of death" for the use of ship captains in the mercantile marine. Several years ago, a very useful list (drawn up, we believe, under the direction of Dr. Walter Dickson, R.N., Medical Inspector of Customs), was issued from the office of the Registrar-General of Seamen, since which time the returns collected by that officer have been much more reliable. The table for 1872 is now before us, and it is unsatisfactory to find that, out of a total of 4123 deaths recorded as having occurred at sea in our marine during the year, no less than 79 are referred to "natural," and 116 to "unknown" causes. The "natural" column means, we presume, that the master of the ship could not classify the disease, and those in the "unknown" column seem to indicate that he made no attempt to do so. We are glad to see, however, that the total number scored in the latter column are diminishing year by year, showing that more pains are taken by, and, as we believe, more facilities are afforded to, the masters of ships in arriving at correct conclusions. Important as this subject is, in connexion with sanitary science in ships, it is nevertheless by no means an easy matter to instruct a layman how to diagnose diseases. No pains ought to be spared to make the medicine chest manual as simple in its diction as possible, for these returns, if trustworthy, ought to aid very materially in showing how we can best improve the hygienic condition of our ships and those who man them. The medical inspection of seamen before signing articles, and the adoption of more varied scales of diet, are both points worthy the attention of the Board of Trade and of shipowners generally, and if the latter were called upon by the former to pay the expenses of sailors left sick in foreign ports, unless it could be proved that the men were healthy when they started, an additional motive would exist to ship none but healthy crews.

HARVEY TERCENTENARY MEMORIAL FUND.

THE sum which, up to the present date, has been contributed to this fund amounts to nearly £750. Upon the list of donors are the names of most of the leading members of the profession. Lord Derby (chairman of the London Committee), the Archbishop of Canterbury, the Duke of Devonshire, Earl Granville, Baron M. de Rothschild, M.P., Lord Pelham, Mr. W. H. Smith, M.P., Professor Rolleston, Professor Huxley, and other prominent persons, have lately contributed handsomely to the fund. Dr. Burrows and Sir James Paget will be proposed at the next meeting of the General Committee as joint treasurers, in the place of the late Dr. Bence Jones. It was also resolved at a recent meeting of the Executive Committee, at which Dr. Burrows, Sir William Gull, Dr. Sibson, Dr. Quain, and Mr. George Eastes (the London hon. sec.) were present, that a public meeting shall be held at the Royal College of Physicians, which has been kindly offered for the purpose by the President and Fellows. The Prince of Wales may perhaps preside on the occasion.

This project for the erection of a noble statue of Harvey at Folkestone, his birthplace, progresses most satisfactorily in all respects. Cheques, which should be crossed "Western Branch of the Bank of England," may be sent to the hon. sec., Mr. George Eastes, or may be paid to the fund, at the Bank, Burlington-gardens.

CONSTANT WATER-SUPPLY.

"Do nothing until you are obliged" would really seem to be the principle upon which our modern statesmen have now taken their stand. Are we to suppose that, setting aside official communications, Cabinet ministers are unable to avail themselves of the ordinary means of acquiring information about matters of public interest which are open to everybody who reads a newspaper? To take an illustration: Last week, in the House of Commons, Mr. Agar Ellis inquired of the Government what steps had been taken or were about to be taken to remedy the defects of the Metropolis Water Act of 1871, as the constant-supply clause had proved to be altogether inoperative for insuring a constant high-pressure service of water for protection against fires. Here is the ministerial reply, as reported in *The Times*:—

"Mr. Stansfeld said he had taken no steps in the matter. The state of the law was that it rested with the Metropolitan Board of Works in the first instance to require a constant supply of water, and if they refused to make the request, or there was any unreasonable delay in making it, the Local Government Board might require the thing to be done. He was not aware that any action had been taken by the Board in the case referred to in the question, and if there were any unreasonable delay in the matter the Local Government Board would have to consider what course it was desirable to take."

That is to say, Mr. Stansfeld is "not aware" on June 9th that, as long ago as the beginning of March last, the very decided "action" was taken by the Metropolitan Board of Works of adopting a resolution declining to exercise their powers under the constant-supply clause, inasmuch as they found themselves excluded "from any jurisdiction which could be exercised in favour of the consumers," while "almost unlimited power" was placed in the hands of the Water Companies. This resolution was duly reported in the daily press at the time; and in commenting upon it we drew attention to the fact that the Board had then determined forthwith to communicate their decision to the Government. Even supposing that the matter has, from some unexplained cause, not yet come officially before Mr. Stansfeld—and that is a point which might with advantage

be cleared up,—can it be possible that he is ignorant of what has so long been known to everybody taking the slightest interest in metropolitan affairs? His colleague, the Home Secretary, indignantly repudiated the other day the notion that he was accustomed to wait for formal notice of his interference being required before taking action. If Mr. Stansfeld is "not aware" that, in reference to the constant-supply system in the metropolis, there is a complete dead-lock existing, we earnestly hope that some effective means may be speedily taken to enlighten him thereon. Where are Mr. Kaye-Shuttleworth and Mr. Stapleton this session?

ECCHYMOSIS OF THE EYEBALL AS A SIGN OF FRACTURED SKULL.

THE significance of ecchymosis of the eyeball has not escaped the attention of surgical writers. Both Velpeau and Mr. Prescott Hewett have dwelt upon its importance when following injury. The former regarded ecchymosis of the lower eyelid following injury as evidence of fracture of the base of the skull; a statement that requires some qualification. The April number of the *Boston Medical and Surgical Journal* contains the report of a clinical lecture on this subject, at the Massachusetts General Hospital, by Dr. R. M. Hodges, in which the lecturer, after affording an explanation, on anatomical grounds, of the diversity in point of position under which a traumatic extravasation of blood may appear, sums up his observations in the form of the following practical generalisations:—1. That an effusion of blood beneath the integuments of the skull, if it does not gravitate backwards, often produces an ecchymosis in the cutaneous surface of the eyelids, but never of the conjunctiva of the lids or globe. 2. That a blow directly upon the eyeball may give rise to an ecchymosis of the conjunctiva, both of the globe and lids. 3. That when fracture of the base of the skull is indicated by ecchymosis, this ecchymosis appears first beneath the conjunctiva of the globe, then beneath the palpebral conjunctiva, and only subsequently in the integument of the eyelids, if at all. 4. That when the injury has been such as to make a fracture probable, external ecchymosis of the lower lid, and less frequently of the upper lid, is a significant symptom, only when it accompanies ecchymosis of the globe, or follows it, after an interval.

ARMY MEDICAL OFFICERS.

A DEPUTATION representing the British Medical Association, and consisting of Sir William Fergusson, Bart., F.R.S., Mr. Ernest Hart, Mr. F. Fowke, Dr. Farquharson, Surgeon-Major Haverty, Mr. Curgenven, and Mr. Lord, waited on Friday on Mr. Cardwell, who was accompanied by the Director-General Sir T. G. B. Logan and Sir Henry Storks. The object of the deputation was to obtain some modification of the recent Army Medical Warrant in the directions set forth in this and other journals and embodied in the memorial lately submitted by the army medical officers at Aldershot. Mr. Cardwell replied *seriatim* to several of the points raised, and in the matter of the forage clause he manifested no sign of yielding. He promised, however, that he would give the subject every attention, and suggested that the various details should be submitted in writing for his consideration and reply. One of the suggestions made by the deputation in regard to promotion for distinguished service is quite in accord with what we have ourselves advocated. Under the present regulations, an officer promoted for distinguished service, instead of being rewarded at the expense of the State, is recompensed at the cost of his seniors, over whose heads he passes. This method of rewarding a *medical* officer is open to the objection that the individual promoted may, *quoad* his professional qualifications, be inferior to those subordinated to him. Still, we are not prepared to say that such promotions should never take place, but the individuals so rewarded should be considered supernumerary of their rank. Why should not the plan of being allowed to count time towards retirement be more frequently followed than it is?

VACCINATION AND SYPHILIS.

IN the last weekly return of the Registrar-General will be found another illustration of the importance of medical men exercising the utmost caution in respect of statements made by them in certifying causes of death. On the 18th of May a policeman's child, aged four years, died in Walworth, the cause of death being certified by the medical attendant as "syphilis through vaccination; phthisis." With commendable prudence the Registrar-General abstained from noting the alleged circumstance in his return until he had communicated the facts as reported to him to the Medical Department, being, no doubt, unwilling to give the anti-vaccinationists so tempting a handle as his official recognition of the case without first satisfying himself of its trustworthiness would have afforded them. The case has been investigated by the Medical Department, and, like many others of the same kind, it has broken down. In the first place, there appears to be no evidence whatever to prove that the child had syphilis; and, even granting that the eruption from which the child suffered might have been of syphilitic origin, the connexion of that effect with vaccination as its cause is shown to be inconsistent with the fact that the eruption first manifested itself so soon after vaccination that the virus, if it were present, must have been introduced before the operation took place.

The Registrar-General does not give the name of the medical attendant who committed himself to the statement, but we regret that any member of our profession should have done so without having first satisfied himself of its exact accuracy.

VITALITY OF AN ANCIENT PEOPLE.

IT has been remarked in this country and others during the prevalence of epidemics that Jews appear occasionally to enjoy an immunity from contagion, and that while a pestilence has swept through streets, decimating the inhabitants, it has left the Jews untouched. This immunity, occurring when the hygienic conditions affecting Jew and Gentile were nearly equal, suggests some curious reflections. In certain countries the death-rate of the Semitic race appears constantly in a favourable light when compared with that of the Christian population. In Roumania, for a long time past, the mortality of Jews and Christians has presented a striking contrast; and, while the deaths among the latter people have greatly exceeded the births, the contrary has been in a marked degree the case among the former. A late report of the British Consul at Bucharest, Mr. Green, dealing with the immense death-rate of the Christian population of Roumania, contains the following remarks:—

"It might be thought that this cruel sign of the decay of the country arose from general climatic causes, from the unhealthiness of localities, from the prevalence of diseases beyond the control of man. This, however, is not the case; and the proof of it is that the Israelitish population, wherever it is found, is not subjected in our country to the law of excessive mortality. The mortality among the Christian population cannot, therefore, be attributed to the above-named causes, which would operate with the same cogency on the Jews. It must have its root in the different manners, customs, and mode of life of the Christians compared with those of the Jews, for it is a remarkable fact

that not only do Roumanians die in larger numbers than they are born, but the same may be said of all Christians in our midst, of whatever nationality. Foreigners who come to our country adopt our customs, and, as a rule, the bad ones first; they begin to eat as we eat, and from this entrance into our social system we may account for their being included under the law of mortality by which the Jews, who remain aloof, having different manners and a different mode of life, are not influenced."

HOSPITAL SUNDAY FOR THE UNITED STATES.

THE brilliant success of the Hospital Sunday amongst ourselves has led us to think of its applicability to the United States. There can be little doubt that there it would be even more successful than here. We give our friends across the Atlantic the idea for what it is worth; they are better judges than we can be. But having regard to the American character, its liberality and its openness to appeals from the pulpit in behalf of any really worthy object, we can imagine no objection to a Hospital Sunday for the United States. Perhaps, indeed, as we have said, they might surpass us in their success. The rate of wages there, too, may make hospitals and dispensaries less necessary to a large number of the population than with us. But still, as medical men, we know that there are great hospitals in America in which good medical work is done, and, despite the wealth of the States, there must be a great number of "strangers within the gates," and others, to whom hospitals are a great boon; and if there is any serious difficulty in meeting their expenses a Hospital Sunday would doubtless remove it in a very splendid way.

THE DETERMINATION OF THE ABSOLUTE QUANTITY OF BLOOD.

DR. J. STEINBERG (Pflüger's *Archiv*, 1873, p. 101) observes that Welcker's colorimetric mode of determining the amount of blood has been adopted by almost all observers, as by Heidenhain, Bischoff, Panum, Gescheidlen, Ranke, and Speigelberg. Brozeit has more recently applied another method, which was suggested by v. Wittich. He obtains the hæmatin from a definite quantity of the blood of the animal as well as that from the washings of its tissue by means of ether and hydrochloric acid, and estimates the proportion of blood removed by washing in this manner. Steinberg, observing that some difficulty exists in estimating fine shades of colour, has employed a method in which a given quantity of blood is diluted till green appears in its spectrum, which forms a test object for the washings. From a series of observations made by this method, Dr. J. Steinberg has arrived at the conclusions that the proportion of blood to the body-weight is in the rabbit as 1 : 12·3 to 13·3; guinea-pig as 1 : 12·0 to 12·3; dog (adult) as 1 : 11·2 to 12·5; dog (young) 1 : 16·2 to 17·8; cat (adult) 1 : 10·4 to 11·9; cat (young) 1 : 17·3 to 18·4; cat (hungry) 1 : 17·8.

MEDICAL OFFICERS DOING DUTY WITH REGIMENTS.

WE learn from some correspondents that the military authorities have intimated that medical officers doing duty with regiments are to pay to the mess and band as usual. We should at once say there must be some mistake in the matter, if it did not seem to be quite in accordance with the whole tenor of the conduct adopted by the authorities in connexion with the new Army Medical Warrant. The medical officers doing duty with regiments either do or do not form an integral part of them. If they do, they are to all intents and purposes purely regimental officers, and, as such, they could fairly be called upon to contribute to the maintenance of regimental funds; but if not, it would seem unfair to compel them to do anything of the kind. Officers temporarily attached to a regiment are commonly made honorary members of the mess. All this comes of the timid tinkering policy of the War Office. As the authorities did not know their own minds, they could not, of course, declare their intentions in their new Warrant. No one could determine from that document whether the medical service was organised on the basis of a general staff or on the twofold system of regimental and staff. All this ought to have been avoided by the exercise of a little common sense and decision. If the authorities had laid down in clear and unmistakable terms, that on and after a certain date the regimental system would cease as regards the medical service; and if they had permitted the present incumbents to hold their regimental appointments for a definite period from the date of the promulgation of the Warrant, all the discontent in this respect would have been avoided.

PRESENTATION.

THE exertions of Mr. Sampson Gamgee on behalf of the medical charities of Birmingham have met with a handsome recognition from the people of that town, in the presentation to himself of an illuminated address, a gold watch, and a purse of 400 guineas, and of a diamond bracelet to Mrs. Gamgee, whose womanly tact and warm sympathy have so powerfully reinforced the untiring efforts of her husband. The testimonial committee included the chairmen of all the medical charities, and Mr. Gamgee may well be gratified with so unequivocal a manifestation of his townsfolk's appreciation as is implied not merely by their substantial gifts, but equally by the whole tenor of the proceedings at the public meeting held for the presentation. He, as is well known, was the originator in 1868 of the working men's fund for the extension of the Queen's Hospital; and recently he has taken in hand, and carried to a most successful issue, the Hospital Saturday movement in Birmingham, which on its first trial brought nearly £5000 into the coffers of the medical charities mainly out of the pockets of the industrial classes, among whom his influence is deservedly great. We heartily congratulate Mr. Gamgee, and trust that his useful and honourable career may extend to the utmost limits.

THE IRISH LOCAL GOVERNMENT BOARD.

THOSE of our readers who have believed in the excellence of the Poor-law system in Ireland will scarcely credit the statement that the abolition of the Medical Commissionership of the Local Government Board is threatened. That office has existed since the Medical Charities Act of 1851, and was continued under a new name by the Local Government Act of last year. The Board have the fullest power of appointment, control, and dismissal of over one thousand medical officers, and these gentlemen would view with dismay the removal from that body of the medical member who alone could understand their claims or grievances. Greatly enlarged powers in the direction of sanitary matters and the prevention of epidemics have recently been entrusted to the Board, and surely this is an inopportune period at which to propose the removal from it of the medical member.

LONDON-SUPER-MARE.

SIR CORDY BURROWS' exertions to enhance the attractions of Brighton seem to increase rather than diminish since his well-earned knighthood. His latest act has been to guarantee the cost of a public gymnasium if the Town Council will improve the level and open the pleasure-ground now in a neglected state. We hope the Works Committee will see

their way to meeting so liberal and well-conceived an offer. Another member of the profession to whom Brighton owed much during his life has laid her under additional obligation after his death. The widow of the late Dr. Edward Latham Ormerod, F.R.S., has, according to his wish, presented the Town Museum with the whole of his splendid and unique collection of wasps' nests, English and foreign, arranged in glass cases, and also of wasps and other insects. What with her aquarium, her museum, her library, and other intellectual attractions, Brighton bids fair to prove as profitable to the mental as she has hitherto been to the bodily welfare of her visitors.

ACTION OF THE VAGUS ON THE HEART.

SCHIFF'S old view that the vagus is really the motor, and not the inhibitory, nerve of the heart has lately received some corroboration from experiments performed by A. Mosso, and recorded in a late number of the Italian journal, *Lo Sperimentale*. Mosso's experiments were peculiar in the circumstance that he employed chemical stimuli to excite the nerve. The animals were dogs, and the cardiac beats were made independent of blood-pressure by the subcutaneous injection of atropine. The vagi and recurrent nerves were excited by the careful application of a drop of caustic solution of potash. The conclusions arrived at by M. Mosso were that the excitation of the nervi vagi increases the frequency of the pulse, in consequence of the irritation of the excito-motor fibres running in the trunk of the vagus. If the sheath of the vago-sympathetic nerve be opened, and the sympathetic be separated from the vagus, chemical excitation of the latter constantly produces an increase of the pulse frequency, whilst excitation of the sympathetic is without perceptible effect on the rhythm of the heart. Mechanical irritation of the inferior laryngeal nerves by simple section is sufficient to increase the pulse frequency, and this quite independently of any exaltation of the blood pressure.

ANOTHER HOSPITAL MISHAP.

IT appears from *The Times* report of an inquest at Reading, that on Saturday last, a woman, aged thirty-two, was poisoned in the Royal Berks Hospital by taking a dose of medicine that had been inaccurately dispensed. The dose is said to have contained two drachms of prussic acid, but this seems scarcely consistent with the statement that the victim survived for half an hour.

We hope this case will prove as useful a lesson to the authorities of the Berkshire Hospital, as the recent accident with carbolic acid at St. George's Hospital proved to that institution. For at St. George's Hospital the managing board are now constructing cupboards in which all the dangerous preparations will be kept, and this seems to us a more rational proceeding than discharging their *employées* when accidents directly attributable to mismanagement in the nursing department occur. However, we look forward to seeing this department thoroughly remodeled.

A COMMITTEE of Physicians has been appointed in Paris to examine M. Henri Rochefort and report whether they consider his health sufficiently good to enable him to bear transportation to New Caledonia. M. Rochefort is suffering from anæmia with extreme general debility and sleeplessness.

THE total amount received up to Wednesday evening by the Lord Mayor from collections on Hospital Sunday exceeded £15,000, less than half the churches, however, being represented by that sum.

A CORRESPONDENT of the *Cologne Gazette* writes, in a letter dated Zanzibar, May 9th, in a somewhat discouraging tone in reference to the Cameron expedition to join Dr. Livingstone. Lieutenant Murphy and young Moffat (Livingstone's brother-in-law) were both suffering from fever, their carriers were deserting, and they were short of money. The country, too, is in a bad state from heavy rains, many places having to be passed by means of ropes stretched from tree to tree. Altogether the writer augurs but badly of the success of the expedition.

DR. J. C. NOTT, the well-known American anthropologist, is just dead. He became a medical practitioner early in life, and, in conjunction with the late Mr. G. R. Gliddon, was the author of two works which created as much controversy in their day as the "Vestiges of Creation"—viz., "The Types of Mankind" and "The Indigenous Races of the Earth." Both were written in support of the thesis that the negro approximates more closely to the chimpanzee than to man.

MR. HIBBERT, replying to a question in Parliament, said it was not true that in April last the Local Government Board addressed a letter to the Bridgwater Board of Guardians to the effect that "the Board were not prepared to say that it was open to the guardians to act upon their own judgment" with respect to successive prosecutions of persons who refused to have their children vaccinated. The word "not" before "open" had been omitted from the quotation.

THE coroners for the metropolitan districts received on Wednesday last a communication from the Home Office, asking for a return of the number of inquests held during the past year upon the bodies of deceased adult paupers (including women and children) who had died from starvation or privation. Those who had received out-door relief, and those who had been offered but had refused admission to the workhouse, are to be distinguished.

THE mortality last week in London and twenty other large towns was at the rate of 21 deaths annually to every 1000 of the estimated population. In the metropolis 1090 deaths were registered, 157 being due to zymotic disease.

THE Baroness Burdett Coutts has given £100 to the Hospital for Women, Soho-square, and has offered to increase it to £200 if other donors will join in an endeavour to raise a sum of £1000.

CHOLERA has appeared in Cincinnati, Memphis, and Nashville, America, chiefly among the negroes. In Nashville the deaths have averaged 15 a day. Business is suspended, and the inhabitants are flying.

AT the recent meeting of the Committee of Reference of the Royal College of Physicians, a resolution was passed against the practice of advertising works with eulogistic notices.

MR. DALRYMPLE rose in the House of Commons on Tuesday night to move the second reading of the Habitual Drunkards Bill, but the House was immediately counted out, there being less than forty members present.

SIR ALEX. ARMSTRONG has been elected Director of the Briton Medical and General Life Assurance Association, in place of the late Dr. Tyler Smith.

THE mortality on the coast of Bonny has lately been very great, the unhealthy "season" having proved unusually fatal to Europeans of all classes.

Correspondence.

"Audi alteram partem."

ON SEXUAL ALLIANCES WITH THE INSANE.

To the Editor of THE LANCET.

SIR,—The very appropriate remarks in the last number of THE LANCET upon the imprudence and wickedness of the marriage of a sane person with an actual lunatic are suggestive of even a more serious calamity having occurred—the intermarriage of *two* persons in a state of unsound mind. It is hardly possible to conceive the case of an individual laying any claim to personal sanity allying himself with a known and recognised lunatic; and yet my experience tells me that if the instances of sane intermarrying with absolutely insane persons are few, the cases are by no means infrequent of sanity unconsciously leaguing itself with some member of a family saturated with madness, or epilepsy, or some form of neurosis. The subsequent evolution of insanity is pretty certain, either in the tainted member of this generation or in its impure offspring.

Very much disease, not only of the nervous centres, but of all centres—in other words, of the entire system—would be avoided by the exercise of a little selective common sense which does not fail a man when he is buying a horse or a pig. The implication of the feelings (represented by the euphonious monosyllable *love*) would seem to destroy all power of discernment and all judgment as to calculating probabilities. It does not occur to a man, or to the friends of a woman, to inquire what are the health antecedents of those who are proposing to themselves a new relation, which may involve an effective use of the reproductive organs. But it is obviously of the first importance that such an inquiry should be made. The omission to do so is pregnant with mischief, and may entail the most cruel consequences upon generations as yet unborn.

It would, indeed, be a gigantic, but not impossible, task to work out, as has been suggested, "a formula of the percentage of probability of insanity, or other serious nervous disorder, in children born with such and such relationships, and placed under such and such necessary circumstances." But, after all, the real question is, are any of us made practically wiser by even the strongest statistical evidence of certain evil results springing from certain unmistakable causes? Only, as it seems to me, when the Legislature interferes by certain enactments thereupon, and attaches serious penal consequences to their infringement. The "cause and just impediment why these persons should not be joined together" is sufficiently manifest to a scientific observer; but he is not in a position, as he should be, to forbid the banns. A large and special experience in the workings of the physiological laws of inheritance enables me to say that the evils resulting from imprudent and unhealthy marriages cannot be overestimated. Let me give a sad and interesting illustration which has recently come under my notice.

A few weeks ago I received a patient here of whose history I could obtain but a very imperfect knowledge. It was clear, however, that his antecedents were those of great respectability, and that he had on three previous occasions been an inmate of an asylum. Last week the wife, a woman of singularly prepossessing appearance, with an infant at her breast, came from her home in Suffolk to visit this poor fellow, and she gave me the following narrative: "I met my husband for the first time in Australia, at a station where my father held an official post of importance. J. H—— was a handsome man, who had just emigrated from England, bringing with him good introductions. He was a frequent guest at our table; we fell in love, and were married. There was no one of whom and about whom family inquiries could be instituted. My father was pleased to see me married to a man who was devoted to me, and who has never yet been unworthy of me. We did not succeed in business, and, my father dying, we returned to England. Soon after our arrival there my husband became melancholy, and then I gathered from his family that both his father and grandfather had died insane, and that several of his brothers and sisters were 'very strange.' He became so unmanageable that it was necessary to place him in a lunatic asylum. Twice since then the insanity has recurred, and twice he has again been confined. I am the mother of ten children by him, the eldest of whom, seventeen years of age, is permanently insane, in a county lunatic asylum. The condition of several of the others already causes me great uneasiness. I am alone, with an unremunerative business on my hands, and these children to provide for. I have no friends (said this poor broken-hearted creature) but you and God."

I do not know that I ever met with a more distressing case than this. The woman had travelled a long distance by an excursion-train to see her husband, and was returning on the morrow calmed by the belief that he was well cared for, that he would be ultimately restored to her, and that, come what may, the wind is ever tempered to the shorn lambs. It is unnecessary to dwell further upon the dreadful imprudence—nay, wickedness—of this marriage. Its evil results may be inexhaustible, and run on through the coming ages with augmented force and in multiplying channels. Is the day called "progressive"? And can these things be?

I am, Sir, yours, &c.,

EDGAR SHEPPARD, M.D., D.C.L.,
Professor of Psychological Medicine in King's College.

Colney Hatch, June, 1873.

RESINÆ COPAIBÆ.

To the Editor of THE LANCET.

SIR,—A few weeks ago there appeared in your "Mirror of Hospital Practice" an account of the use of the "resina copaibæ" in my wards at Guy's, as a substitute for the simple copaiba, when a diuretic was required. The notice having caused numerous inquiries from medical men as to the best mode of its administration, I would ask permission to take advantage of your columns to state that Mr. Gerrard, the dispenser at the hospital, advises the following formula:—"Resin of copaiba, three drachms; rectified spirit, five drachms; spirit of chloroform, one drachm; mucilage of acacia, two ounces; water to make twelve ounces." An ounce (containing fifteen grains) to be taken three times a day.

I may take this opportunity of saying that I have received numerous communications acknowledging the superiority of the pure resin over the oleo-resin in the absence of odour, at the same time that the diuretic property remains. One patient, a medical man suffering from cardiac dropsy, and who had taken the ordinary remedies without much benefit, commenced the resin in the form of a pill, taking three pills, containing five grains of the resin in each, three times daily. Diuresis at once commenced, with a departure of all the fluid from the abdomen and legs.

I am, Sir, your obedient servant,

SAMUEL WILKS.

Grosvenor-street, Grosvenor-square, W., June 13th, 1873.

THE LATE MR. LUTWIDGE.

To the Editor of THE LANCET.

SIR,—I have read with deep interest Mr. Martin Coates's account, in THE LANCET of to-day, of the last moments of Mr. Lutwidge, who for so many years filled the office of Commissioner in Lunacy. May I ask what idea the writer wishes to convey by the following passage:—"This miserable and fretful criminal lunatic can be of no use in this world to anyone, is a perpetual menace and danger to all who approach him, and will be a burthen on the nation as long as he lives." Does he suggest that this mad assassin should expiate his crime on the gallows? How revolting such an idea would be to the good and humane old man whom he so cruelly murdered, were it possible for him to give utterance to his feelings. It may, as Mr. Coates says, be true that the madman "can be of no use in this world to anyone," unless he might, like

"Imperial Cæsar, dead, and turned to clay,
Stop a hole to keep the wind away."

The lunatic "will be a burthen on the nation as long as he lives." No doubt of the fact. It is indeed lamentable that the heavily taxed ratepayers should have to support in chronic idleness so many dangerous as well as harmless lunatics, and that the State should have to contribute towards the maintenance of the man who so suddenly deprived the country of the valuable services of an upright and useful public servant. Can Mr. Coates suggest a remedy for these admitted grievances apart from acting on the *lex talionis* principle? Mr. Coates says that the death of Mr. Lutwidge by an act of murderous violence must be considered as "a happy termination of a useful and honourable career." "Happy termination" indeed! In what does Mr. Lutwidge's happiness consist, apart altogether from his being the recipient of the rewards which no doubt will be meted to him for having lived a "sober, godly, and righteous life"? Death, under its most favourable aspects, is a solemn and awful event; but how terribly appalling it is to our every sense when one so highly respected by all who knew him is suddenly struck down by the hands of an assassin (whose interests he was in the act of promoting) be he sane or insane, responsible or irresponsible.

I am, Sir, your obedient servant,

FORBES WINSLOW, M.D.

Cavendish-square, June 14th, 1873.

THE COLLEGE OF SURGEONS' ELECTION.

To the Editor of THE LANCET.

SIR,—I have ever taken a lively interest in the election of Fellows to serve as members of the Council of the Royal College of Surgeons.

Mr. Thomas Wakley, having been nominated as a candidate for the membership of the Council, I have been at some unusual pains to ascertain his medico-political views, and I find them to be as follows:—

1. The proceedings of the Council should be published.
2. The representation of the College in the General Medical Council should be vested in the suffrages of the fellows and members of the College.
3. The examiners should be elected from the body of the profession, and not be (exclusively?) members of the Council. They should hold office for two or three years, and be eligible once only for re-election.
4. Fellows residing at a certain distance from the College should be allowed to vote by proxy.
5. Presidents and vice-presidents should be chosen from the members of the Council generally, and not from the examiners only.
6. Successive re-election of retiring councillors is highly objectionable.
7. A proportionate number of provincial surgeons should always be chosen to serve upon the Council.
8. Meetings of members and fellows within the walls of the College should be permitted under certain conditions.

Mr. Wakley is a proprietor of THE LANCET. Having been exclusively engaged in the practice of his profession, he has never taken the slightest part in the editorial conduct of that journal.

The medico-political school in which Mr. Wakley has been brought up should not be forgotten. His father, the late Mr. Wakley, half a century ago inaugurated, and to the close of his career consistently and indefatigably promoted, those very reforms in the College of Surgeons to which we owe the voice we have in the elections of members of Council to-day.

These are summarily Mr. Wakley's views on these all-important subjects. The only proposition I dissent to is that which suggests, "That fellows residing at a certain distance from the College should be allowed to vote by proxy"; but from my personal knowledge of Mr. Wakley's professional and medico-political qualifications I consider him pre-eminently qualified to become a member of Council of the Royal College of Surgeons of England.

I remain, Sir, your obedient servant,

JOHN WIBLIN, F.R.C.S. (Exam.)

Southampton, June 17th, 1873.

THE APPLICATION OF EARTH IN SURGERY.

To the Editor of THE LANCET.

SIR,—It was my good fortune during the winter to be residing in the same hotels, both at Nice and Rome, with the eminent American surgeon, Dr. Hewson, of Philadelphia, who brought to my notice the advantages attending the use of earth as a dressing in surgical cases. He told me he attributed his great success at the Pennsylvanian General Hospital—a success which has been remarkable since the American war, especially in connexion with cases of amputation—entirely to the use of this agent. The results of its use which have come more or less directly under my own observation have been so successful that I venture to send you brief outlines of the cases.

1. A case of epithelioma of the cheek, of twelve years' standing. In December there was an ulcer on the right cheek larger than a half-crown piece, which was being treated with dry-earth applications. In March I saw the case dressed in Rome, as did also Dr. Pantaleoni and other physicians. There were then, instead of the extensive ulcer of three months before, superficial points of ulceration which, had they been collected together, a fourpenny-piece would have covered. The patient, a gentleman of sixty-two years of age, was not very sanguine, having had the unfavourable opinions of several distinguished surgeons, but he expressed himself most gratefully for the relief from pain and from the horribly fetid odour, which made life a burden to him before the earth was applied.

2. A physician at Mentone, under Dr. Hughes Bennett's care I believe, sent for Dr. Hewson from Nice to resect his knee-joint, or to amputate his leg. Dr. Hewson found an abscess, thought to be metastatic, in the head of the fibula. He begged to be allowed to try earth dressing before proceeding to an operation. The case did perfectly well, and the joint is apparently as good as ever.

3. The American chaplain in Rome was thrown from his horse, and struck his leg against a rail. The trowsers were not cut, but the tibia, the spine of which was laid bare for several inches, sustained a comminuted fracture, and the tibialis anticus was partly stripped from its attachment. Dr. Hewson put in two or three stitches, and applied earth dressing. The patient had scarcely any pain; there was but little discharge, and the leg rapidly healed. The almost total absence of pain was very remarkable.

4. At Naples a poor woman accosted me in the street, and asked me to cure a large chronic ulcer on the right leg, which extended from the external malleolus to midway between the ankle and knee. I offered her a few soldi, and told her to go to the hospital. She said she was not begging for money, but to be cured, and as I was an English doctor, I could cure her if I would. Her grandfather had been in the service of an English nobleman, it seemed. I managed to find some light-yellow clay, allowed it to dry, pounded it and sifted it through fine muslin, and applied it to the sore, covering it with ordinary grocer's blue paper, the edges of which I wetted in order to make it adhere to the skin. I told the poor creature to remain at home and rest the ulcerated leg on a chair even when she sat spinning at her door. The next morning I found her waiting for me at the gate of the hotel. She said she was quite free from pain; she had slept all night, a thing she had not done for months before; and with tears in her eyes she thanked me for the relief I had given her. In three weeks the ulcer was almost well. It is right to say I took means to improve the general health.

5. An American gentleman in Rome asked me to prescribe for him, as he had gonorrhœa. The gonorrhœa was very acute, with chordæ and severe pain during micturition. As he bound me to secrecy, I could not borrow a small double-tubed catheter which Dr. Hewson uses in these cases, and was obliged to inject a large quantity of muddy water with an ordinary syringe. The patient was greatly relieved by the first application, which was repeated on the two succeeding days, though the discharge and pain had ceased on the second day. The patient had a dose of chloral and an aperient each night.

6. A young Roman, a friend of the previous patient, came to me complaining of rheumatism. He had had a gleet

eight months. I injected the urethra with muddy water every other morning for ten days, when the discharge ceased. The rheumatic pains ceased also, supporting, therefore, my friend Dr. Bond's theory of the cause of gonorrhœal rheumatism. This patient took iron and arsenic in small doses, as he was somewhat anæmic.

The freedom from pain, the destruction of all odour from the wound, the diminution of the discharges, and the rapid healing after the application of the earth, were the features common to all these cases which impressed me most.

Dr. Hewson, who will shortly visit England, believes the action of the earth mainly a chemical one, and he covers his dressing with blue paper in order that the chemical rays of light may be admitted to the wound.

I am, Sir, your obedient servant,

Venice, May 17th, 1873. JOSEPH GROVES, B.A., M.B. Lond.

CLINICAL THERMOMETERS AND THEIR DEVIATIONS.

To the Editor of THE LANCET.

SIR,—The re-discovery by Mr. Kesteven of the fact that clinical thermometers vary much in the indications which they afford will, it is to be hoped, prevent any one from purchasing one of these instruments unaccompanied by its certificate of verification.

The errors to which all clinical thermometers are liable, and the necessity that exists for their verification at one of the observatories, were pointed out by me in a paper read before the British Medical Association in 1869.

I have several times found, on placing half a dozen of these thermometers in a basin of warm water, that they have all furnished different readings. Dr. Prior, of Bedford, related some years ago an experiment of comparison which he made with five thermometers, three of them being medical instruments. He plunged them all in water at a temperature of 105° or 106° F., and allowed it gradually to cool. The result is given in his own words: "No two of them precisely corresponded at any time."

What are the principal causes of the errors of clinical thermometers?

1. *A difference in the diameter of the bore throughout their length.* In consequence of this defect, which seems at present almost unavoidable in their manufacture, the majority of clinical thermometers indicate a temperature sometimes higher, sometimes lower, at other times higher in one part of the scale and lower in another part, than is correct. Here, for example, is a copy of a certificate belonging to one of my clinical thermometers, which not only reads too high, but possesses a bore of unequal size:—"At 85°–0·3°; at 90°–0·4°; at 95°–0·5°; at 100°–0·4°; at 105°–0·4°."

2. *A contraction of the glass bulb.*—The bulb, having been formed by the aid of heat, undergoes contraction, the fibres of the glass taking some little time to assume their permanent position. Hence it has been usual amongst some makers of meteorological instruments to lay down their thermometers, like their port, for improvement with age. In consequence of this change in the glass, clinical thermometers are apt to read higher as they become older. The alteration in the bulb especially occurs during the year or two immediately succeeding the period of their construction.

What precautions should be taken in order to ensure the possession of trustworthy instruments?

A clinical thermometer unprovided with a certificate of its *recent* verification at either the Kew or Greenwich Observatories should never be purchased. The corrections, if any, contained in the certificate, should be applied to each observation that is made.

Those who have employed unverified clinical thermometers should send them to Kew to be verified. A trifling fee is charged by the authorities for the examination of each instrument.

Manufacturers of clinical thermometers should not engrave the scale on the tubes of their thermometers until they have been filled with mercury for at least two years.

It must be remembered, however, that the verification of a two- or three-year old thermometer at an observatory cannot be relied on as a guarantee of the perpetual accuracy of an instrument. The following note is very properly appended to all the certificates issued at Kew:—"This instrument ought at some future date to be again tested at the melting-point of ice, and, if its reading at that point be found different from that now given, an appropriate correction ought to be applied to all the above points."

I remain, Sir, yours faithfully,

CORNELIUS B. FOX, M.D., M.R.C.P. Lond.,
Fellow of the British and Member of the Scottish Meteorological Societies.

Scarborough, June 10th, 1873.

IRISH MEDICAL ASSOCIATION.

To the Editor of THE LANCET.

SIR,—In justice to the Irish Medical Association, a society which for upwards of twenty years has been carrying on its useful operations, I claim of your well-known courtesy and fairness, space in the next issue of your paper to contradict the injurious misstatements of your Dublin correspondent referring to the last meeting of the Society, and which nothing but the most wilful ignorance, or something worse, on his part, could have induced him to publish.

Passing over the ill-natured question as to the annual meeting of the Society as unworthy of notice, I proceed to the statement "that the Council of the Society takes credit to itself for the work done by other societies." This is so vague an accusation that it is difficult to deal with it otherwise than by the simplest but most positive denial of its truth. The Council against which your correspondent makes this gross charge is composed of gentlemen of the highest standing in their profession, among whom are the President and three ex-presidents of the Royal College of Surgeons, and is a sufficient guarantee that any report drawn up with its approval would contain nothing but the most truthful statement of the business transacted by it during its official year, and I defy your correspondent to point out a single statement in the report that cannot be proved by the records of the Society. But your correspondent is guilty of another error in reference to the proposal made by the Society to form among its members some provision for the widows and children of Poor-law and dispensary medical officers. This scheme has now been for two years under the consideration of the profession, and has been so fully canvassed and discussed by its promoters that the fact of your correspondent mixing up with it the Superannuation Act obtained by the Association two years ago as a provision for the worn-out medical officer (not for his widow), confirms my opinion that he did not take the trouble of being present at the meeting he so incorrectly describes and so unfairly maligns.

I remain, Sir, your obedient servant,

Dublin, June 16th, 1873. E. J. QUINAN, M.D.,
Hon. Sec., Irish Medical Association.

*** We have not had time to communicate with our Dublin correspondent on the subject of Dr. Quinan's letter, but feel sure he can give an explanation next week. —ED. L.

LIFE ASSURANCE COMBINED WITH SICK ALLOWANCE.

To the Editor of THE LANCET.

SIR,—Several letters have appeared in your valuable paper lately, urging the establishment of a combined life assurance with sick allowance suitable for members of our profession.

Being one of the directors of the British Provident Life and Guarantee Association, at 96, London-wall, E.C., I brought the subject under the consideration of the board at our last meeting. It was unanimously resolved that the actuary should be instructed to prepare the necessary tables, especially bearing in mind Dr. Woodward's excellent suggestion that the amount at death should depend upon the sum drawn out as sick pay.

Our office is a young one, and our subscribed capital is small, but we have no debts, and are doing a good life business. We have an efficient staff, with good central offices, and nothing will be wanted for preliminary expenses beyond a little extra printing, advertising, and postage.

We shall be glad to receive the active co-operation or the suggestions of any who are anxious to promote the scheme.

As soon as the tables are ready they shall, with other information, be sent on for your inspection. I believe that under proper management it can, not only be made a commercial success, but a great and lasting boon to the profession.

I am, Sir, yours, &c.,

HENRY T. TREND, L.R.C.P.ED., &c.

Petherton-road, Highbury New Park, June 17th, 1873.

PARIS.

(From our own Correspondent.)

I HAVE had occasion in previous letters to allude to the arrangements which were being carried out for the formation of a Superior Council of Public Education, to which considerable importance is attached, as it will have to deliberate and decide on all questions of educational reform. All the elections and nominations have now taken place, and the Council is complete. The members have been taken from all the great educational, scientific, religious, and administrative bodies of the country. The medical profession is more especially represented by Dr. Barth, elected by the Paris Academy of Medicine; Dr. Wurtz, elected by the three Medical Faculties of France; and Dr. Bouisson, the Dean of the Montpellier School of Medicine. Besides these three members, the composition of the Council is as follows:—Vice-President, M. Dumas, representing the Institute; the Dean of the Paris Faculty of Letters, M. Patin; three Inspector-Generals of Public Education, two Councillors of State, a General, an Admiral, two Archbishops, and two Bishops; the Dean of the Protestant Faculty of Theology of Montauban, M. Sardinous; the Pastor of the Church of Augsburg; the Great Rabbin of France; the First President of the Cour de Cassation; three Members of the Institute; the Administrator of the Collége de France; M. Milne Edwards, Dean of the Paris Faculty of Sciences; three Members of the Superior Council of Agriculture and Commerce; the Director of the Museum of Natural History, M. Chevreuil; a Professor at the School of Law; and a Professor at the Faculty of Letters.

Dr. Decaisne is one of the most indefatigable workers here among those who are doing battle against absinthe, and, generally, alcohol in all its formidable shapes. A few days ago he began a new campaign, now directed against bitters, at the Academy of Sciences. People said: "It's all well and good; absinthe, we must admit, is deadly; but then we have got bitters. That's a resource, and so harmless." Dr. Decaisne answers "No," and in his communication to the Academy, after a long investigation of the subject, he boldly enunciates several conclusions which must sadly disappoint and terrify all bitters-drinkers. As in respect of absinthe and vermouth, Dr. Decaisne is convinced that the bitter, aromatic, and exciting plants which enter into the composition of bitters, develop in a marked degree and enhance the mischievous effects of alcohol. These effects are of course heightened when, as so often happens, bitters is fabricated with spoilt herbs and alcohol of bad quality, to disguise the taste of which strong acids are employed. Dr. Decaisne thinks that the alcohol extracted from beet-root, potatoes, and corn, and which is so commonly used for the fabrication of bitters, is much more harmful than alcohol made out of wine. He therefore condemns bitters because, both on account of the character of the plants and the strength and bad quality of the alcohol, it is a drink which promptly brings on acute and chronic alcoholism. "Epileptiform fits," says Dr. Decaisne, "may be equally caused by the abuse of absinthe, vermouth, bitters, chartreuse, and even some adulterated white wines"; and, to avoid even the slightest risk, he concludes that the use of bitters, even when of good quality and for the sake of "getting an appetite," must be abandoned.

At one of the last sittings of the Municipal Council, the administration of the Assistance Publique sent in a demand for supplies to take such measures as may prevent the pretty little maritime hospital of Berck-sur-Mer from being destroyed by the sea. Berck-sur-Mer is quite a model hospital, which was built on the seaside for the purpose of receiving convalescent and scrofulous children, after the plan which was started in Italy, and has been so very successful there. At the time the hospital was built it was complained that it was too far from the sea, and that this was a great inconvenience. Now the sea has gained ground after various works which have been done by the Government at the mouth of the Athie (a river near there), and the Assistance Publique has been obliged to send some men into Holland to study the system of dykes, and is asking the Municipal Council for a grant, as the hospital belongs to the town of Paris.

I have to record with regret the melancholy death of M. Bricheteau, the talented and esteemed editor of the *Bulletin de la Thérapeutique*, at a comparatively early age. Dr. Bricheteau was universally liked for his geniality and kindness of manner. He was a distinguished worker and an elegant writer, but had been unfortunate in his *concours*, chiefly through excessive timidity of character; and this failure, when people considered and he himself knew that he was worthy of the highest posts, told deeply on his character and health. For the last two or three years he had been obliged to give up his editorial duties on the *Bulletin*, and seek for health in retirement from the busy struggle of professional life in Paris. But his constitution gave way gradually, and he has just died in the last stage of an affection of the nervous centres.

The Society of Temperance, or French association against the abuse of alcohol, held its annual meeting on Sunday last. Mr. Hippolyte Passy, member of the Institute, occupied the chair, and the meeting was well attended. The proceedings of the day included a report by Dr. Lunier on the progress and action of the association; a report on the prizes which are to be given away in 1873, by M. Bertrand and Dr. Magnan, the well-known author of "Researches on the Comparative Effects of Alcohol and Absinthe"; a communication by Dr. Foville on the American asylums for drunkards; and several questions of minor interest.

At the last sitting of the *Société de Biologie* an interesting communication was made by MM. Jolyet and Blanche, on the results of various experiments which they had conducted with nitrous oxide. Some of the experiments had been made with the seeds of watercresses; these had been put on a bit of moist paper under a glass containing pure protoxide of nitrogen. No germination took place, but on lifting up the glass a little so as to allow air to enter, the seed germinated, and two days after a small stalk began to appear. Other experiments were made on animals; birds and frogs had been subjected to the influence of the gas, and death had supervened rapidly after a few minutes, or even a few seconds. In all the experiments sensibility had persisted until the end. At the post-mortem the blood of the heart and arteries was black. The authors concluded that "protoxide of nitrogen does not keep up the combustion of animals or plants, and that it produces anæsthesia only through asphyxia, when the animal is in imminent danger of death." Dr. Charcot remarked that he had seen the gas administered only once, and that it was a most formidable *tableau*; the face was livid and presented the aspect of approaching death, or of some forms of epilepsy; yet life came back rapidly, and there had been no accident. M. Blot alluded to cases of death, all of which had not been published. M. Laborde had seen the gas applied in a case of confinement; he did not know why it should be called laughing gas, as the poor woman had let fall torrents of tears. Claude Bernard recalled the experiments of Boussingault; leaves of plants put under a glass filled with pure carbonic acid had not decomposed the gas, but on introducing a certain quantity of oxygen the usual phenomena had taken place.

Paris, June, 1873.

ERGOT OF RYE IN HEADACHE.—Dr. Silver, of Sidney, Ohio, uses the liquid extract in doses of from ten to twenty drops every half hour until relief is obtained, or until four or five doses have been taken.—*Philadelphia Medical and Surgical Reporter.*

Obituary.

DR. DAVID SKAE.

A PRACTITIONER of rare good sense and skill in that department of the profession in which *par excellence* these qualities are imperative has passed away in Dr. David Skae. The deceased gentleman belonged to a clever family, and was born in Edinburgh on the 5th of July, 1814. His education was pursued in St. Andrews, first under the Rev. J. Lothian, from whose tuition he passed in due course to the University of that city, where he attended the literary classes, distinguishing himself especially in mathematics. At first his professional bias was to the law, and he worked for some time in an attorney's office; but his true bent was towards medicine, and he accordingly enrolled as a student in that faculty in the University of Edinburgh. He became Fellow of the Royal College of Surgeons in 1836, and honorary M.D. of St. Andrews in 1842. At the Royal College of Surgeons he was appointed lecturer on Medical Jurisprudence in 1836, and delivered fourteen courses on that subject. Thereafter, in conjunction with Drs. Handyside, Lonsdale, and Professor Spence, he lectured on Anatomy at the same school, which was then at its zenith, with Knox as lecturer on Physiology, and the other subjects represented by Hughes Bennett, Douglas Maclagan, John Reid, George Wilson, G. E. Hay, Goodsir, Henderson, J. Y. Simpson, Edward Forbes, Sir William Fergusson, Dr. Argyll Robertson, and Jas. Miller. During all this time he was medical examiner in St. Andrews, while he was also devoting special study to medico-psychology and contributing papers to the journals on that difficult department. His powers as a lecturer were above the average, as was attested by the largeness of his classes in Medical Jurisprudence, so that when appointed to the chair of Medico-Psychology in the extra-academical school he came to its duties with qualifications as a teacher of a mature and effective order. Previously to this, in 1846, he had been elected physician-superintendent of the Royal Edinburgh Asylum for the Insane, where his studies in nervous and mental physiology rapidly bore fruit, not only as a clinical lecturer, but as a skilled practitioner. The subject also employed his pen in numerous papers contributed to the local and metropolitan journals. Of these the most important were on "General Paralysis," "The Legal Relations of Insanity," "The Specific Gravity of the Brain in Insanity," and, above all, "The Classification of the various Forms of Insanity on a Rational and Practical Basis." This was published in 1863 as the address he delivered in his capacity of President of the Medico-Psychological Association; and by it he will be best remembered.

He died on the 18th of April of the present year, aged fifty-eight. The cause of death was cancer of the upper part of the œsophagus. Dr. Skae was a man of rare qualities of head and heart, and possessed an extraordinary attraction over all who came in contact with him, especially pupils. His taste was refined, and he had accomplished himself in many walks of literature and art. As an instance of his versatility as a physician, we may mention that, having acted for many years as a surgeon to the Lock Hospital, he made special studies in syphilis, and was the first to distinguish that particular variety of syphilis which was inoculable—a discovery which Ricord made only a year or two ago. He took a warm interest in contemporary science, and was a member of not a few foreign societies.

MR. JAMES BYALL ROUCH, F.R.C.S.
(OF COVENTRY.)

MR. ROUCH entered as a student at St. Bartholomew's Hospital in 1864, and took the gold medal in Botany in 1866 at the Apothecaries' Society, and in Materia Medica and Therapeutics in 1867. In the following year he took the Membership of the College of Surgeons and the Licentiateship of the Apothecaries' Society. Soon after this he was elected house-surgeon to the Bradford Infirmary, the duties of which office he performed with credit to himself and satisfaction to the staff until he took the Fellowship of the College of Surgeons, when he was appointed to the honorary surgeoncy of the Metropolitan Free Hospital. This appointment he held until November, 1871, when, becoming dissatisfied with the slow progress of London practice, he sought a provincial appointment; and, being elected surgeon to the Coventry and Warwickshire Hospital, he set up a practice in the city of Coventry. Shortly after his migration symptoms of kidney disease began to develop themselves, and compelled him to seek restoration to health in a voyage. He sailed for Queensland early in the present year, and died a few days after the vessel reached its destination, Rockhampton. Mr. Rouch's career was cut short at the early age of thirty-four. He gave promise of great energy and immense industry, and, had he lived, would doubtless have risen to eminence in the profession either in this country or the colonies.

THOMAS REACH, A.B., M.B.T.C.D., L.R.C.S.I.

WE regret to announce the death of Dr. Thomas Reach, which took place at his residence, Wellington-place, Belfast, on May 28th, at the age of seventy-seven. The deceased gentleman graduated in Arts and Medicine in the University of Dublin in 1828. He entered on the practice of his profession in Letterkenny, but subsequently removed to Coleraine, and ultimately settled in Belfast, in 1840, in which town he resided till his death. He had a considerable practice, which was principally among the wealthier classes, and he occupied a deservedly high position in local society.

Dr. Reach possessed remarkable diagnostic power. He was thoroughly devoted to his profession, and continued till his death to take a lively interest in all medical subjects. No one was actuated by a stronger sense of personal and professional honour, and he enjoyed in a marked degree the respect of the medical profession in the north of Ireland.

Dr. Reach was well known by his important contributions to the subject of syphilitic nervous disease; his cases, of which the earliest appeared in the *Dublin Quarterly Journal* in 1851, being among the earliest as well as most original contributions to the knowledge of that subject, and having been referred to in most works dealing with this class of disease. These papers, together with a number of other contributions to the subject of spinal affections, were collected into a volume which was published by Churchill, in 1867.

SAMUEL KERSWILL, M.R.C.S.
(DEVONPORT.)

ON Friday, May 9th, there passed away from amongst us the father of the profession in the west of England. Samuel Kerswill was born in the year 1781, and was admitted a member of the College of Surgeons of England in the year 1802. We fancy there are few older members remaining on the roll of the College, and certainly there are none who will be followed to the grave with more universal respect than Mr. Kerswill. For many years he had ceased to practise his profession; but, as a Justice of the Peace for the borough of Devonport, he continued up to within a few years of his decease to take a somewhat active part in public affairs. His kind and genial manner endeared him to all those with whom he came in contact, and it would be hard to find the man who was ever his enemy. He leaves behind him worthy representatives—in his son, who practises at St. Germans in Cornwall, and who entertained the members of the British Medical Association so hospitably in 1871; and two grandsons, both of whom are actively and successfully practising in Cornwall.

WILLIAM FRITH HUNTER.

MR. HUNTER died very suddenly, at the age of thirty-two years, of heart disease, at Margate. He had recently retired from practice, and was devoting himself to scientific pursuits. He founded the Microscopical Society at Margate. His family had been in practice in his native town for a period of time considerably over a century. In the firm of Hunter, Thornton, and Hunter, and subsequently of Thornton, Hunter, and Treves, he represented the fourth generation of his family. He was buried with military honours (having been an officer in the Artillery Corps of Volunteers), and was followed by an extraordinary con-

course of people, the procession alone numbering several hundreds. He was much respected, and the lustre of his father's name shone out with renewed splendour at the funeral of the son.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members, having passed the requisite examinations for the Fellowship on the 29th, 30th, and 31st ult., were, at a meeting of the Council held on the 19th inst., duly admitted Fellows of the College:—

Anderson, Richd. B., L.S.A., Delamere-cresct., Westbourne-terr.
Bovill, Edward, James-street.
Buckley, Samuel, M.B. Lond., Crumpsall.
Chalfers, Edward, L.S.A., Keighley, Yorkshire.
Clark, Andrew, L.S.A., Old Burlington-street.
Furner, Willoughby, St. Bartholomew's Hospital.
Jalland, William H., L.R.C.P. Lond., Nottingham.
Lowne, Benjamin T., L.S.A., Colville-gardens, Notting-hill.
M'Carthy, Jeremiah, M.B. Lond., South-street.
M'Kellar, Alexander O., Royal Free Hospital.
Morris, Henry, M.B. Lond., Bedford-square.
Warner, Francis, M.B. Lond., Royal Hospital, Guildford.
Wiseman, John G., L.R.C.P. Lond., Ossett, Yorkshire.

Of the 23 candidates examined, 10 failed to satisfy the Court of Examiners, and were referred to their professional studies for twelve months.

[*Erratum.*—In the list published on the 31st ult. of gentlemen who obtained the L.M.R.C.S. Eng., for *Henry* Broom read *John* Broom.]

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on June 12th:—

Harrison, Robert Hooper, Regent's-park.
Harle, Ezra, St. Bartholomew's Hospital.
Palin, Henry Venables, West Felton, Salop.
Rouse, Thomas M., H.M. Prison, Millbank.

The following gentleman also on the same day passed his Primary Professional Examination:—

Lambert, John, Leeds Infirmary.

COLLEGE OF PHYSICIANS, IRELAND.—At examinations recently held the following gentlemen obtained the licences in Medicine and Midwifery:—

MEDICINE.—Daniel Robert Alcock, John Henry Boxwell, Henry Eccles Evans, Arthur Benjamin Finny, William Greer, William M'Enery, John Richard Palmer, Luke Pescan, William Henry Warren.
MIDWIFERY.—Daniel Robert Alcock, Henry Eccles Evans, Arthur Benj. Finny, William M'Enery, Robert Spence, William Henry Warren.

THE Royal Hospital for Incurables has received £500 from Mr. Frederick Sheppard. James Rorke, Esq., has bequeathed £100 to the Mater Misericordiæ Hospital, Dublin, and £100 to the Hospital for Incurables, Dublin.

THE SOUTH DURHAM AND CLEVELAND MEDICAL SOCIETY.—The first general meeting to inaugurate the founding of this Society was held at Redcar on the 5th inst., when a large number of members attended and subsequently dined together. The following is a list of officers for the ensuing year:—President: Dr. Eastwood, Dinsdale Park. Vice-presidents: Mr. C. Trotter, Stockton, and Dr. Croster, Middlesborough. Honorary Secretaries: Dr. Ellerton, Middlesborough, and Dr. Foss, Stockton. The committee is taken from members residing at Stockton, Middlesborough, and Darlington, where meetings will be held during the winter months.

VENTNOR HOSPITAL BALL.—A grand ball in aid of this hospital, which is erected on the cottage principle in the Undercliff, near Ventnor, Isle of Wight, was held on Tuesday evening at Willis's Rooms, King-street, St. James's, under the patronage of H.R.H. the Princess Christian, H.R.H. the Princess Mary Adelaide, and a distinguished list of the ladies of the nobility and friends of the charity. The dancing commenced with a fancy quadrille of ladies representing the flowers of the months of the year, in which the following ladies took part:—Lady Blanche Somerset, September, wheat and corn flowers; Lady Sibele Lumley, July, field flowers; Lady Albreda Fitzwilliam, January, snowdrops; Lady Margaret Lascelles, November, dead leaves; Lady Anne Finch, March, primroses; Lady Grace Gordon, May, acacia; Lady Flora Hastings, February, violets; Miss Howard, April, crocuses; Miss Townley, June, roses; Miss L'Estrange, December, winter roses; Miss Milner, August, wild roses; Miss Baillie-Cochrane, October, hops. The costumes were of a very pleasing character, and the ladies who organised this quadrille are to be complimented on the success it achieved. The company dispersed at an early hour of the morning, having spent a very pleasant and enjoyable evening. We trust the ball has been the means of adding considerably to the funds of this excellent and rising institution.

THE PUBLIC HEALTH ACT, 1872.

[In the following list the letters "P.S.D." signify Port Sanitary District, "R.S.D." Rural Sanitary District, and "U.S.D." Urban Sanitary District.]

Districts, and Medical Officers.	*Salary per ann.*	*Area in Acres.*	*Population.*
Abergavenny, R.S.D.—Dr. Robert Smythe	Not fixed	83402	6985
Alnwick, R.S.D.—Dr. George F. Easton	£50 & fees	71925	6218
Barnstaple, P.S.D.—Mr. Andrew Fernie	Not fixed		
Braintree, R.S.D.—viz.:			
Braintree District.—Mr. John Harrison ...	£25	8197	2102
Bocking ,, Mr. Thomas Taylor ...	£25	11507	5117
Finchingfield ,, Mr. Henry R. G. Rust ...	£25	8307	2341
Wethersfield ,, Mr. Henry Rust	£25	8319	2293
Bristol, U.S.D.—Mr. David Davies (Med. Insp.)	£300	4683	182324
Chelmsford, U.S.D.—Mr. Edward H. Carter ...	£25	2940	9318
Denbigh, U.S.D.—Mr. John Lloyd Roberts ...	£30	...	6322
East Molesey, U.S.D.—Dr. Robert Skimming ...	£20	760	2408
Exeter, U.S.D. — Mr. J. S. Perkins ... / Mr. John Woodman... / Mr. F. P. Phelps ... / Mr. A. R. S. Perkins...	£20 &c. per ann. for periodical reports; fees for all other services	1800	35000
Flegg, East and West, R.S.D.—Mr. John T. Waller	£80	20087	9425
Ham Common, U.S.D.—Mr. Edward M. Shirtliff	£15	1913	1230
Hambledon, R.S.D.—Mr. A. Arthur Napper ...	£50 and fees	60351	15276
Heanor, U.S.D.—Mr. Thomas S. Woolley	£20	1569	5000
Isle of Wight, R.S.D.—viz.:			
Arreton District—Mr. W. F. Foster	£30		
Brading ,, Mr. Charles Meeres ...	£35		
Carisbrooke ,, Mr. Ernest P. Wilkins ...	£35		
Cowes ,, Dr. Wm. Hoffmeister ...	£25		
Godshill ,, Dr. E. R. Woodford	£35		
Ryde ,, Dr. Daniel Beaton	£25		
Shorwell ,, Dr. Henry T. Castle	£35		
Whippingham Dist.—Mr. Frank B. Tuttlett	£30		
Yarmouth Dist.—Dr. Herbert Taylor	£40		
Kington, U.S.D.—Mr. Gustavus Foote	£20	1200	3111
Kettering, R.S.D. } Mr. John W. Dryland ... ... Kettering, U.S.D. }	£60 / £30	30800 / ...	15000 / 7000
Kidderminster, U.S.D.—Mr. David Corbet... ...	£30	1180	19403
Kingston-on-Thames, U.S.D.—Mr. E. M. Shirliff	£52 10s.	1085	15367
Llandilofawr, R.S.D.—viz.:			
Western District—Mr. Thos. Chas. Lloyd (vice Williams, deceased	According to services	...	2761
Llandovery, U.S.D.—Dr. Josiah Williams	Not fixed	2000	1861
Lexden and Winstree, R.S.D.—Dr. E. W. Bawtree	£200	73462	24072
Little Lever, U.S.D.—Dr. Thomas B. Eames ...	£15	808	4214
Macclesfield, U.S.D.—Dr. George Bland	£30	2210	35671
Monmouth, U.S.D.—Dr. George Mayou	£40	5707	5874
Pickering, R.S.D. } Dr. John H. Walker ... ... Pickering, U.S.D. }	£80	88062	12737
Rainford, U.S.D.—Mr. Edward Milliner	£10	880	3396
Ramsgate, U.S.D.—Mr. James Wm. Barry	£20	260	14600
Roxley, U.S.D.—Mr. Lucas M. Bennett	Not fixed	4784	374
St. Ives, Hunts, R.S.D.—viz.:			
St. Ives District.—Mr. William H. D. Mence	£20	10837	3629
Somersham Dist.—Dr. James Deane	£20	14700	4480
Swavesey Dist.—Mr. Charles P. Daniell ...	£20	16247	4795
Warboys Dist.—Dr. David M. Serjeant	£20	15431	3355
Salford, U.S.D.—Dr. John F. W. Tatham	£400	6208	124805
Salisbury, U.S.D.—Mr. John Winzar	£60	696	12903
Sherborne, R.S.D.—viz.:			
Southern District—Mr. Edward Turner... ...	£22 10s.	13429	3076
North-West District—Mr. Nath. E. Davies ...	£12 12s. 6d.	6066	1842
North-East District—Mr. Horace Nutt	£10	6737	1340
Sherborne Dist. (part of)—Mr. N. E. Davies	£25	13817	2179
Sleaford, U.S.D. } Dr. Alfred Ashby ... ... Sleaford, New, U.S.D. }	£15 / £15	126757 / 1800	21075 / 3362
Spennymoor, U.S.D.—Dr. Edward Heffernan ...	£25	133	5000
Stourbridge, U.S.D.—Mr. W. Moseley Richards...	£50	402	9376
Sutton-in-Ashfield, U.S.D.—Dr. Alex. K. Dyer ...	£20	6040	8810
Swaffham, R.S.D.—viz.:			
Sporle District.—Mr. Frederic J. Thomas ...	£20	21700	3467
Swaffham ,, Mr. Robert R. Marriott ...	£12	17273	1556
Saham ,, Dr. John Ewart	£12	11820	2554
Oxborough ,, Mr. Henry C. B. Steele ...	£8	10098	1431
Bradenham ,, Mr. John Rivett Clouting...	£5	4091	786
Igburgh ,, Mr. William Joy	£5	3800	373
Tranmere, U.S.D.—Dr. William G. Laidlaw ...	£30	1043	16143
Tynemouth, R.S.D.—viz.:			
Division No. 1—Dr. Henry D. Ward	£50	10018	11627
,, No. 2—Dr. Peter Alexander	£50	15228	14377
Walker U.S.D.—Mr. James Richd. Lownds ...	£100	1200	10000
Warrington, R.S.D. { Mr. Richard Shepton ... Mr. John H. Gornall...	£100 / £100	14231 / 9686	4780 / 4026
Wellington, Salop, U.S.D.—Mr. James Brookes...	£10	340	6000
Westhoughton, U.S.D.—Dr. John G. Brayton ...	£20	4120	6807
Wilton, R.S.D.—Mr. Charles R. Straton	£120	56908	9029
Winterton, U.S.D.—Mr. Lucas M. Bennett... ...	Not fixed	3628	1756
Worthy, R.S.D.—viz.:			
District No. 1—Dr. Samuel Drew	£112	14832	13261
,, No. 2—Mr. Henry Payne	£77	12468	9117
,, No. 3—Mr. George Browning	£35	24615	4141

Medical Appointments.

ADAMSON, J. G., M.D., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Bellaghy Dispensary District of the Magherafelt Union, Co. Londonderry, vice Carre, resigned.

BALFOUR, W. G., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Medical Superintendent of the Metropolitan Asylum District Asylum for Imbeciles and Harmless Lunatics, Haverstock-hill, vice Grieve, resigned.

COURTENAY, E. M., A.B., M.B., Assistant Medical Officer, Derby County Asylum, has been appointed Medical Superintendent of the District Asylum, Limerick.

DUDLEY, J. G., M.D., M.R.C.P.I., has been appointed a Physician to the Royal General Dispensary, Bartholomew-close, vice Mayo, resigned.

EADY, G. J., L.R.C.P.L., M.S.C.S.E., has been appointed Medical Officer of Health for the Harlow District of the Epping Rural Sanitary District.

FENN, E., M.R.C.S.E., has been appointed Admiralty Surgeon and Agent, Surgeon to the Admiralty Pier Club, and to the Foresters at Dover, vice Dr. J. B. Gill, resigned.

FINNY, A., L.R.C.S.I., L.K.Q.C.P.I., has been appointed Resident Registrar and Assistant-Surgeon to the County Down Infirmary, Downpatrick, vice MacLaughlin, resigned.

GRIGG, W. C., M.D., M.R.C.P.L., has been appointed an Assistant-Physician to the Victoria Hospital for Sick Children, Chelsea, vice Evans.

HOBSLEY, J., F.C.S., has been appointed Public Analyst for the City of Gloucester.

JAGO, T., M.R.C.S.E., has been appointed Honorary Surgeon to the Holloway and North Islington Dispensary, vice Turner, resigned.

LEONARD, W., M.R.C.S.E., has been appointed Resident Medical Officer and Secretary to the Chelsea, Brompton, and Belgrave Dispensary, vice Maybury.

M'CLURE, T., L.R.C.P.Ed., has been appointed Medical Officer for District No. 6 of the Bath Union, vice Hitchins, resigned.

NELIGAN, J. W., M.B., L.R.C.S.I., L.M., has been appointed a Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Tralee Dispensary District of the Tralee Union, vice Denny, deceased.

SHARMAN, W. M., M.R.C.S.E., L.R.C.P., has been appointed Medical Officer and Public Vaccinator for the Swinton District of the Barton-upon-Irwell Union, vice Farr, deceased.

SPENCER, L. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Longton or No. 5 District of the Preston Union, vice Evans, resigned.

STANLEY, W. E. S., L.R.C.P.Ed., has been appointed Medical Officer for District No. 7 of the Bath Union, vice M'Clure.

STEPHENS, E. B., L.F.P. & S. Glas., has been appointed Medical Officer for the Tedburn St. Mary District of the St. Thomas Union, Exeter.

STEVENS, G., F.F.P. & S. Glas., has been appointed Medical Officer to the Hand of Charity Lodge of Odd Fellows, Manchester Unity, Norton, Suffolk, vice Matthews, deceased.

SUTCLIFFE, G. G. A., L.R.C.P.Ed., has been appointed Medical Officer for the Kilham District of the Driffield Union, vice Harrison, resigned.

TURNER, H., M.R.C.S.E., has been appointed a Medical Officer to the Norwich Dispensary.

WALKER, ELIZA L., M.D., has been appointed Resident House-Surgeon to the Hospital for Sick Children, Royal Fort, St. Michael's-hill, Bristol.

WILLIAMS, Dr. J., has been appointed Medical Officer to the Swinton Industrial Schools near Manchester, vice Farr, deceased.

WOOD, R., M.R.C.S.E., has been appointed Medical Officer of Health for the Urban Sanitary District of Ilkeston, Derbyshire: £30 per annum.

Births, Marriages, and Deaths.

BIRTHS.

CLARK.—On the 27th ult., at Rose-hill, Dorking, the wife of Wm. F. Clark, M.R.C.S.E., of a son.

GRIEVE.—On the 17th inst., at Bertram Lodge, Hampstead, the wife of Robert Grieve, M.D., of a son.

PEARSON.—On the 16th inst., at Bridge-road, Stockton-on-Tees, the wife of T. R. Pearson, M.D., C.M., of a son.

RANGER.—On the 27th ult., at Westfield Villa, Peckham-rye, the wife of W. G. Ranger, M.R.C.S.E., of a son.

RENSHAW.—On the 24th ult., at Beech Hurst, Ashton Mersey, the wife of Chas. Renshaw, M.D., of a daughter.

WORKMAN.—On the 9th inst., at Castle-street, Reading, the wife of F. Workman, M.R.C.S.E., of a son.

MARRIAGES.

ASHTON—BRIGHT.—On the 5th inst., at St. Luke's, Cheltenham, William Ashton, Surgeon-Major Army Medical Department, to Jessy Rose, youngest daughter of James Bright, M.D., of Wellington-square, Cheltenham.

COLEMAN—HURST.—On the 12th inst., at St. Peter's, Bramley, Henry W. Coleman, M.R.C.S.E., to Annie, daughter of the late Benj. Hirst, Esq.

MILLER—KERBY.—On the 11th inst., at Christ's Church, Highbury, Frederick Montague Miller, Esq., of Rectory-terrace, Amhurst-road, N., eldest son of Dr. C. M. Miller, of Stoke Newington, to Mary Elizabeth, second daughter of Chas. H. Kerby, Esq., of Highbury-park.—No Cards.

DEATHS.

ANDERSON.—On the 11th inst., at New-cross-road, S.E., after a short illness, Lindsay Melvin Anderson, Student at Guy's Hospital, eldest and much-loved son of John Anderson, M.D., aged 18.

BURSEY.—On the 23rd ult., Henry Bursey, M.R.C.S.E., of Newbury, aged 54.

EMPSON.—On the 24th ult., C. F. Empson, L.R.C.P.Ed., of Darlaston.

HUNTER.—On the 22nd ult., W. F. Hunter, M.R.C.S.E., of Margate, aged 32.

STEWART.—On the 12th inst., Thomas A. Stewart, M.D., M.R.C.S.E., late Surgeon to the Plymouth Public Dispensary, aged 71.

WOMERSLEY.—On the 13th ult., at Baltimore, U.S.A., Dr. H. P. Womersley, a native of Hastings, aged 31.

Notes, Short Comments, and Answers to Correspondents.

CASE OF RECOVERY AFTER RUPTURED UTERUS, WITH PROTRUSION OF INTESTINE.

A CASE of the above occurrence recently formed the subject of a paper read before the Reading Pathological Society by Mr. O. Lowsley, of that place. The following may be taken as affording a brief epitome of the facts of this somewhat remarkable case:—Mr. Lowsley was called on November 11th last to a patient in her fifth labour. About fifteen minutes after the birth of a male child, as the placenta did not come away, he introduced his hand to the insertion of the cord, and made gentle traction on it, but it gave way from being very gelatinous. Feeling something in contact with his hand, resembling a portion of the placenta, he brought it down, and found, to his surprise, that it was in reality a loop of intestine, which he immediately returned. The patient soon afterwards began to exhibit symptoms of collapse. Some brandy and opium were administered. A consultation was held with a neighbouring practitioner, Mr. Moxhay, and the placenta was removed. The symptoms of collapse became much more marked, and the worst prognosis was formed. The patient, however, recovered from her collapsed condition, and ultimately (December 30th) was reported as quite well. It appeared that she had been suffering for some time before her confinement from uterine discharges, attended with some bearing-down pain, and on one occasion before the child was born, she felt much pain, and thought that something had given way, and this was followed by symptoms of collapse for some hours. Mr. Lowsley was quite positive that immediately on passing the hand into the uterus he encountered the intestine, and he was equally clear that it did not pass through any opening in the wall of the vagina.

M.R.C.S.E.—Directions as to the treatment of yellow fever are briefly given in the Ship Captain's Medical Guide, published under the authority of the Board of Trade; and we are informed that the Board are about to issue some directions likely to assist in the prevention of the disease among the British shipping frequenting these coasts.

Dr. James Ross, (Waterfoot.)—The paper shall receive early attention.

THE PROTRACTED CONFINEMENT OF LUNATICS IN OUR ASYLUM.

To the Editor of THE LANCET.

SIR,—The recent sad death of Mr. Lutwidge through an attack on him by a lunatic seems to be an opportunity for inquiring if anything could be done to lessen the chances of such an event happening to anyone else, by taking into consideration any good that might be derived by from time to time giving a patient a change from one asylum to another in the case of pauper patients, or patients who have been in one asylum for a long period, and are getting uneasy and want a change of some kind. Take, for instance, the case of the patient who attacked Mr. Lutwidge. Here we have one who is insane, and has been so for twenty years, who has never during that period inflicted any bodily harm on anyone, but has always been of a grumbling and irritable disposition; and so he goes on from year to year, getting no better or no worse, suffering from delusions on one point. He is seen by the magistrates when they come round, and by the commissioners on their visit, but he remains the same, and of course cannot be discharged. It then comes across his mind that by killing somebody he will get a trial, and will get removed, or at least something will be done; and this is not such a very uncommon way for this class of patients to think. So he goes on from day to day, getting more irritable, and brooding over this one thought, and only waiting for an opportunity to carry it into execution, till one day he stumbles over a nail. The temptation is too strong to be resisted; he sharpens the nail, and then comes the question who to kill. No doubt he fancied that by inflicting the injury on some important person it would be the better for him; so he waits his chance, pretends to be asleep, and, coming behind the unfortunate gentleman, inflicts a fatal injury. I think that a patient of this class, who has been confined for a long time, might be made more contented if he was removed to another asylum. A change sometimes does good, perhaps only for the time, but in some cases considerable relief is obtained. It seems to me to show them in the best way possible that everything is being done for the best, and they are not utterly shut out from the world. I think it might be done more than it is. Of course it is impossible to guard against such accidents. You may examine a patient every night to see if he has anything concealed about his person. If he knows the examination is a system, he would conceal the weapon, whatever it was, about the ground or yard till he required it for use. The effect of this recent attack will be, if this patient gets a trial and removal to another asylum, a sort of stimulant for others to act in the same way. It is his last chance he fancies, and a desperate one. Still it looks fearfully true.—Yours truly,

SYDNEY OLIVE BISHOP, M.R.C.S.E., &c.,
June, 1873. Resident Medical Officer, Fisherton Asylum, Salisbury.

HALIFAX BOROUGH HOSPITAL.

Mr. Dolan has issued a circular on the above subject to all the practitioners in the town. We have indicated already our opinion of the principal question involved, and we presume that there will be no difference of opinion in the profession in regard to it and the other questions to which the editor of the *Halifax Times* desires a reply.

Simplicitas should apply to the Under-Secretary of State for India, India Office. As regards his other question, he will find the examination papers in the Appendices to the Blue-books of the department.

M.R.C.S.—Our correspondent's letter is not clear as to the nature and source of the so-called doctorate. Actual facts would be interesting.

Dr. Andrew Gray (Melbourne) is thanked for his letter.

SANITARY SCIENCE.

WE are glad to notice evidence that the public is beginning to take an interest in sanitary matters, and that foremost among those who are ready to satisfy their longings for information are members of our own profession. Among such efforts we may notice with approval a course of lectures on the "Principles of Public Health as applied to the every-day life of the Middle and Working Classes," now being given by Dr. Edward F. Willoughby, in connexion with a Working Men's Club in Stoke Newington. The lectures, which are open to friends as well as members of the Club, do not exceed half an hour in delivery, and are followed by discussion and conversation. It appears to be the aim of the lecturer to confine his remarks, except so far as is necessary to the comprehension of the subject, to such matters as come within the cognisance and under the control of the private householder. The first of the series was given on Tuesday, the 3rd inst., and treated of house-drainage and the construction of closets. It was illustrated by a number of carefully-executed drawings, including some showing the only real effective method of preventing the entrance of sewer-gas into houses. Sections, plans, and elevations of the trough-closets erected in the poorer parts of Liverpool were exhibited, and the causes of failure of these as used in several schools and workhouses in London pointed out. Last Tuesday the lecturer took for his subject, "Water, its sources, service, storage, and impurities"; explaining (with diagrams) the difference between surface and deep wells, the advantages of constant service, the construction and management of cisterns, the best kinds of filters, and the chief impurities of water, with easy methods of detecting and as far as possible removing the same, illustrating his subject by actual experiment on samples of water prepared for the occasion. We congratulate Dr. Willoughby on his praiseworthy efforts to enlighten the minds of his neighbours as to sanitary science.

Dr. Westropp.—Such notices are always to be avoided as far as possible by medical men, as savouring too much of advertisement. They are the more unnecessary, as a doctor's movements in a place where he is the only practitioner are regular and habitual, and so become well known at the hotels and by the inhabitants.

Mr. O'Grady, (Dublin.)—Mr. Curran's paper will shortly appear.

"MILD TOBACCO."

To the Editor of THE LANCET.

SIR,—I beg to ask through the columns of your journal for information on the following subject.

I have been asked occasionally by patients suffering from the injurious effects of excessive smoking to recommend some kind of mild tobacco containing less nicotine than shag or bird's-eye. I have suggested the use of Latakia or Turkish tobaccos, but am told that they are "hot in the mouth," make the tongue dry, and cannot be smoked through a short pipe or small meerschaum. I have been told that "Kanaster" is the tobacco chiefly used in Germany, and that it contains but little nicotine. The specimens I have seen have a very ammoniacal smell. Perhaps some of your readers who have travelled in Germany could give me information on this point, and also a description of the tobacco generally used in that country. Again, I have been informed that Havannah tobacco contains less nicotine than that grown in America. The desideratum appears to be a tobacco containing but little nicotine, and as pleasant to smoke as the best bird's-eye. Is it true that Latakia and Turkish tobaccos contain ammonia?

I am, Sir, yours faithfully,

June, 1873. B. Y. W. X.

ERRATUM: THE SKIM-MILK TREATMENT.

Dr. Donkin directs our attention to some errors in our report of his remarks at the Clinical Society. He says he explained at the meeting the manner in which the skim-milk treatment differs from the dietetic treatment introduced by Rollo nearly a hundred years ago, and improved since by Prout and Christison; that Sir Robert Christison is a strenuous advocate of the dietetic treatment. Dr. Donkin further stated that the effect of all other remedies in his own hands in diabetes had been negative, and that opium often did more harm than good. The well-known opinions of Sir Robert Christison on the one hand, and of Dr. Donkin on the other, make the inaccuracy of our report of less consequence. But the great interest and importance of the whole subject, whether viewed in a physiological or therapeutical light, make accuracy very desirable.

W. B.—Information of the mere number of deaths in a public institution is not unreasonably sought for from the registrar. If any comment is made or contemplated on the causes of death, then it would be more courteous to confer with the medical man.

J. P. S., (Lochgilphead.)—A convalescent home is about to be established in connexion with the Aberdeen Infirmary. £3000 has already been subscribed, and authority has been given to the Committee of Management to buy for the purpose the house and grounds of Lochhead, now in the market.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—May I ask through your valuable columns if anything is being done by militia surgeons to obtain compensation for the loss they will soon sustain under Mr. Cardwell's new depôt system? I have heard from very good authority that several medical officers (all from the regular army) have been appointed to the new centres, and the remaining vacancies will be soon filled in the same manner, after which the medical examination of recruits for the militia will no longer be conducted by militia surgeons, nor will their services be required during preliminary drill. Surely, Sir, it is high time some steps were taken to have our claims advocated at head-quarters. I will feel obliged by any gentleman affording me information on the subject.

Yours, &c.,

June, 1873. A MILITIA SURGEON.

CASE OF SNAKE-BITE; INJECTION OF AMMONIA INTO VEINS OF BOTH ARMS; RECOVERY.

To the Editor of THE LANCET.

SIR,—In the "Annus Medicus," published in the last number of THE LANCET for 1871, I read the following: "The injection of ammonia into the veins is alleged to have been done, not only without killing the patient, but actually with the effect of killing the snake poison within him, by Professor Halford, of Melbourne. This procedure, which does not seem free from risk, requires careful repetition in the case of bites by undoubtedly poisonous snakes before it can be accepted." This injection of ammonia has now been used with success by so many different practitioners in various parts of the colony of Victoria that its freedom from danger must be admitted. The following case, abridged from my notes, will show some of the effects produced; but I may add that we in Australia who have once used this remedy feel so satisfied of its wonderful effect in stimulating the heart that I, for one, should at once inject ammonia if called to a case of poisoning by chloroform,* carbonic acid gas, or prussic acid—in any case, in fact, in which the action of the heart was suddenly paralysed.

Mrs. T. M——, a robust young woman, living in the bush, twenty-three miles from my residence, on the morning of Jan. 15th trod upon a black snake (*Pseudechis porphyriacus*), which coiled round her right leg and bit her on the inner side of the calf through the stocking. She caught the reptile by the back of the neck, and, dragging it away, the stocking was torn in her efforts to uncoil it, when it again bit her on the right wrist. Half an hour elapsed, and a volunteer scarified the first wound and sucked it freely; but the second wound on the wrist was overlooked. The accident occurred at 10.30 A.M. At 12.30 P.M. she was taken to the nearest township, when both wounds were scarified freely by a non-professional resident there. Liquor ammoniæ, tincture of iodine, and carbolic acid were also applied locally before I saw the case. She was said to be in a state of collapse at 3 P.M., which lasted an hour and a quarter. Stimulants had no effect on the collapse, and a magneto-electric machine was used, to which she is said to have responded. From some cause not explained, much time was lost before a messenger was despatched for a medical man, and the patient was first seen by me at exactly 7 P.M., fully eight hours after receiving the bite. The patient at this time was flushed and excitable, but perfectly conscious; pupils contracted; pulse 128, weak, but quick. Knowing the danger of delay in these cases, I at once injected the full contents of Halford's syringe, filled with equal parts of strong liquor ammoniæ and water into the median cephalic vein of right arm. Halford's syringe is merely a modification of an ordinary hypodermic syringe, the bore in the needle being larger, and it holds exactly half a drachm. The pain caused by the injection was great and evident, but I perceived no other immediate effects. At 7.30 P.M. the pulse was reduced to 110; at 9.10 P.M. it was 144, and in the intervals it was continuously rising and falling. At 10 P.M. most alarming symptoms came on. There was constant and restless jactitation. She said she was dying, and that she felt a faintness round the heart. Pulse now 120. For the second time I injected fifteen minims of the strongest liquor ammoniæ and fifteen minims of water, and this time into the median cephalic vein of left arm. The patient screamed at the moment of forcing onwards the contents of the syringe, saying, "Doctor, it has gone to my heart." The effect was immediate. The patient rallied; she lost that feeling of faintness at the heart which made her express the belief that she was dying; and at 10.45 P.M. the pulse was 110, and she was sleeping calmly. During the night she had intervals of sleeping and then of waking, during which time she talked rationally with those around her. Towards morning she had a feeling at her heart which she thus expressed: "It would first beat, and then run down like a clock." She mentioned to me the peculiar sensations caused by the injection by saying that she "felt the stuff in her nose" almost immediately after the operation.

Jan. 16th.—10.15 A.M.: Pulse 120; quiet, and inclined to sleep. Ordered her nutritious diet of all kinds; prescribed a mixture containing ammonia and quinine; brandy and ammonia to be given in addition if symptoms demand it.—6 P.M.: Faintness again came on.

17th.—5 A.M.: Patient excessively weak; pupils greatly dilated; pulse 76, and almost imperceptible. Attendant has neglected to give the ammonia and brandy at intervals as ordered. Hot brandy and water, with the addition of ammonia, was now given; hot-water bottles to feet, &c. Under this treatment she rallied.—9 A.M.: In a profuse perspiration, and pulse 110.—1 P.M.: Pulse 88, soft and compressible.

18th.—10 A.M.: Body cool; patient calm, but very weak. I now left her.

Remarks.—I did not see the patient after the above date. She went away still farther into the bush; but wrote to me about a fortnight afterwards, saying she had two painful lumps at the bend of each elbow, where the ammonia was injected. I do not know what these lumps were. She was never again seen by a medical man; but last month (April) I heard she was well and strong again, and going about her work as usual. The snake, I may add, was a full-sized animal, about five feet in length, and its bite is very deadly. Professor Halford has no belief in internal remedies. He says that after snake-bite the functions of the stomach are paralysed, and that it will not absorb even alcohol. The sucking of the wound—the best of all remedies if applied at once—can in this instance have been but futile, half an hour having elapsed before it was employed. It is well known the poison of a snake is absorbed into the system in from one to three minutes from the moment of the bite. It will be noticed that on my first arrival the ordinary symptoms of snake poisoning were not present—that is, dilated pupil and cold. She was possibly also excited by drink and mental impressions of the accident. The recurrence of the dangerous symptoms thirty and forty hours after the accident is one of the dreaded complications of these cases. I do not regard this particular case as a typical one of snake-bite, many of the symptoms being different from those usually seen; but the patient was undoubtedly bitten by a very deadly snake, and it certainly shows very clearly that we may inject a very powerful solution of ammonia into a vein with comparative impunity. In correspondence with me in reference to this case, Dr. Halford remarks: "I am greatly disappointed that never once in India has it been tried on a human being, although Fayrer tells me 10,000 die there annually. The reason you give for using it would have been my own—viz., the seeming uselessness of other modes of treatment; this they confess in India likewise, but hesitate to use such a *dangerous* remedy."

I am, Sir, yours, &c.,

W. H. JENKINS, M.R.C.S. Eng.,
Honorary Surgeon, Hamilton Hospital, Victoria.

Hamilton, Victoria, May, 1873.

* A favourite experiment of Professor Halford's is to completely narcotise a dog with chloroform, and then inject ammonia into a vein. The heart, though it may have ceased beating, responds immediately.

ENGLISH FACTORY LEGISLATION.

Fas est et ab hoste doceri, says the poet of the Metamorphoses; but it is better to be taught by a friend. On the subject of our factory legislation we have no work so well done as that of Ernst Edler von Plener, first Secretary to the Austrian Embassy in London. Its merits were at once recognised by Mr. Mundella, who got it translated by Dr. Weinmann, and prefixed to it an Introduction. The author has added an Appendix on Continental Labour, the restrictions as to which are much in advance of our own. For example, in Germany the earliest age at which factory work begins is twelve. With us it is *eight*. School in Germany is attended by the factory child till the close of the fifteenth year. With us his schooling ceases at twelve. Night work is interdicted among our Teutonic cousins to all under sixteen. On the other hand, they have no inspection on such a scale as ours; though when they improve on their present system, their inspectorate will be drawn from medical, and not (as with us) from promiscuous, sources.

Iota.—We share our correspondent's surprise and regret at the renewed activity of "Dr." Kahn and his "Museum and Gallery of Science." Handbills are freely distributed, setting forth that the "curiosities of optical science" and lectures on the "skeleton" by "an eminent London professor" are to be witnessed and heard there for the price of one shilling. The handbill concludes with an intimation that "the doctor" can be consulted at the rooms adjoining the museum from 11 to 5 and 7 to 10. We hope a vigilant scrutiny will be exercised over the "eminent London professor" and his colleague the "doctor." It cost the medical officers at the Lock Hospital £200 to prosecute Dr. Kahn's representatives the other day. Is a similar outlay to be again required?

Mr. T. Cowley Eager.—The circular in question is bad, though, alas, not much worse than many that reach us.

CATHETERS.

To the Editor of THE LANCET.

SIR,—Will you allow me to answer in your pages those who have written to me privately to inquire where the catheters described in my clinical lecture can be obtained? The silver instruments, plug, &c., are made by Messrs. Krohne and Sesemann, of Whitechapel-road. The mineralised india-rubber catheters, made by Mr. Warne, of Tottenham, can be had, I believe, of almost any instrument maker; but it is due to Messrs. Weiss, of the Strand, that I should state that they believe that it was at their suggestion, and for them, that Mr. Warne first made them about two years ago. I procured them about the same time direct from Mr. Warne. They are very superior to the vulcanised ones formerly in use, and are of mineralised india-rubber, enamelled. It is perhaps needless to add that I have no share whatever in the improvement in the mode of manufacture of these catheters, the credit of which rests with the makers, Mr. Warne and Messrs. Weiss.

Yours, &c.,

Finsbury-circus, June 19th, 1873. JONATHAN HUTCHINSON.

OBESITY A CAUSE OF UTERINE DISEASES.

DR. H. KIRSCH, of Prague, lately examined 214 stout women with a view of determining how far obesity is a cause of uterine diseases. He found menstrual irregularity in 208 cases; of these, 146 had leucorrhœa, 56 had chronic metritis, 47 suffered from hysteria, 48 were sterile, 30 had anteflexion and anteversion of the womb, and 11 had retroflexion. Dr. Kirsch recommends a mild course of "Banting" combined with the waters of Carlsbad in the treatment of obese females.

N., (Truro.)—The phthisical form of lunacy is less rare than is generally imagined. According to Dr. Clouston (Morisonian Lecturer on Insanity in the Edinburgh College of Physicians) its chief symptom is suspicion. The same accurate observer gives an *instantia prerogativa* of the traumatic type of insanity. A boy of five years of age was struck on the back of the head with a ruler by an irate schoolmaster. No fracture was inflicted; but the boy grew silent and stupid. Suddenly he became a great swearer, and his demeanour was violent and habits dirty. After the lapse of eleven or twelve years he was seized with a succession of epileptic fits, after one of which he died. Rheumatic and choreic insanity are ascribed by Dr. Clouston to the same cause—"lesion of the motor centres." Podagrous or gouty insanity is rare; and, through having hitherto been regarded as a complication of gout rather than a distinct form of insanity, its victims have seldom been treated in asylums.

Mr. Thomas Watt, (Hovingham.)—We should strongly advise our correspondent to place the children in a separate dormitory.

DYTE *versus* ST. PANCRAS GUARDIANS: APPEAL FUND.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me space for the appended list, and also to explain to the subscribers to the above Fund that the total subscriptions amounted to £152 8*s.* 6*d.*, whilst the total of Mr. Dyte's expenses (law costs on both sides amounting to £234 17*s.* 4*d.*) was £288 2*s.* 6*d.* He is thus left with a loss of £135 14*s.*; but desires me, whilst conveying his heartiest thanks to the kind friends who assisted him, to say that he does not intend to appeal further to their generosity.

Additional Subscriptions (included in total).—Dr. Bush, 10*s.*; Dr. Chaldecott, 10*s.*; Dr. Drew, 10*s.*; W. Fuller, Esq., 21*s.*; Dr. Head, 20*s.*; Dr. F. Hawthorn, 10*s.* 6*d.*; Dr. Howell, 21*s.*; Dr. Harley, 10*s.* 6*d.*; Dr. Hewitt, 21*s.*; Dr. T. J. Hughes, 10*s.* 6*d.*; H. Horton, Esq., 10*s.* 6*d.*; J. Jackson, Esq., 20*s.*; G. H. Macnamara, Esq., 10*s.*; Dr. Manisty, 10*s.*; F. Manning, Esq., 10*s.*; — Meadowscroft, Esq., 12*s.*; J. Milward, Esq., 10*s.* 6*d.*; R. Nason, Esq., 21*s.*; J. Noble, Esq., 21*s.*; W. Porter, Esq., 10*s.*; G. W. Popplewell, Esq., 10*s.*; T. Robinson, Esq., 10*s.* 6*d.*; Dr. Steer, 10*s.* 6*d.*; W. F. Teevan, Esq., 21*s.*; Dr. S. Ward, 21*s.*; Dr. Wilson, 21*s.*; F. Welch, Esq., 10*s.* 6*d.*; Dr. Woodman, 21*s.*; smaller sums, £2 8*s.* 6*d.*

Yours faithfully,

W. BATHURST WOODMAN.

Christopher-street, Finsbury-square, June 19th, 1873.

NOXIOUS BUSINESSES.

BEFORE the Committee of the House of Commons on this subject, Dr. Stevenson gave evidence on Tuesday as to the slaughter-houses in St. Pancras. These, he thought, were on the whole well conducted; but they were too numerous, and too close to dwelling-houses. More stringent inspection and greater caution in licensing should be imposed. Dr. Letheby said that the constantly increasing amount of dead meat brought from the country and abroad realises higher prices than that killed in the metropolis, and is driving away the slaughtering business from London. Private slaughter-houses are an intolerable nuisance. The noise of the animals in these places and their filthiness were a local annoyance. Dr. Liddell gave evidence as to Whitechapel. The smell from the slaughter-houses was noxious. Public abattoirs should be instituted, slaughter-houses in Whitechapel being on the increase. Under the present system proper supervision is impossible.

Dr. P. Leslie's communication has been mislaid, leading to delay in answering it. The scale of charges is not, as a whole, unreasonable; but it seems to us to be far too minute and inquisitorial for practical use. It is the duty of a medical man to inquire into the disease of his patient, and not to be too inquisitive as to his circumstances.

Mr. John Riley, (Barnes.)—The matter had better stand over until the result of the summons is known.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I send you a copy of a petition that it is proposed to send, individually, to the Right Hon. the Secretary of State for War, varied according to the circumstances of each case, by the late regimental officers of the Army Medical Department serving in India, praying him to redress the grievances under which they are now suffering, owing to the unexampled severity with which the provisions of the new Medical Warrant are pressing upon them.

Your powerful pen has always been employed upon our behalf with the best results; and now the department is looking forward most anxiously for your aid and co-operation in the endeavour to release it from difficulties such as never have oppressed a body of men who have ever striven earnestly to perform the onerous duties entrusted to them conscientiously and well.

I remain, Sir, yours truly,

X. Y.

[COPY.]

The humble petition of ———, late Assistant-Surgeon in ——— Regiment of Cavalry,

Sheweth,—That when your petitioner entered the Army Medical Department it was optional either to serve upon the medical staff or to exchange to, or be appointed to, a regiment. That under these circumstances your petitioner was permitted by the authorities to exchange into the —— regiment, serving in India, and that this exchange cost your petitioner a very large sum of money, inasmuch as he was obliged by his predecessor in the regiment to pay him such a sum for the privilege of the exchange, and was required, in addition, to provide himself with a costly uniform and horse equipment; and, further, he has been obliged by the Queen's Regulations to pay upon his entrance into the regiment a donation of fifty days' pay according to his relative rank, against which there was appeal, and that ever since he has monthly and annually paid subscriptions levied in accordance with instructions laid down in the Queen's Regulations. That, in addition to the foregoing, your petitioner possessed the privilege of re-exchanging to the medical staff, and thereby probably receiving from his successor a sum equivalent to that which he had himself paid; the authorities never having refused their sanction to, or placed any restriction upon, the payment of such sums as the price of exchange. Again, your petitioner had, by right of the donations and subscriptions he had paid, acquired a vested interest in his regiment, a vote in the distribution of regimental funds, and a claim upon the mess and band property.

Sheweth,—That under the provisions of the new Army Medical Warrant, all the before-mentioned privileges and claims are at a blow destroyed. That your petitioner is summarily removed from his regiment without the least warning, and placed upon the medical staff. That he is, therefore, forced to provide himself with a new uniform; that his costly regimental uniform and cavalry appointments are rendered useless to him. That all the advantages accruing to him from long custom in the regiment, and from the large sums he has been compelled to pay to regimental funds; that all the advantages he enjoyed from permanence in one regiment,—all are by the new Warrant removed from him.

Your petitioner, therefore, most respectfully urges upon you that you will give your favourable consideration to the points herein set forth, with a view to your petitioner receiving some compensation for the grievous losses inflicted on him by the new Army Medical Warrant.

And your petitioner will ever pray.

L.S.A., (Portsmouth.)—We believe that the account of the use of bromide of potassium in cases of summer diarrhœa or cholera affecting infants and young children appeared in an American medical journal, and that it was originally and very strongly recommended by some medical officer of the United States Army. We are unable to speak from personal experience as to its efficacy. We have little or no faith in any general line of practice. Cases afford their own special indications as to what is required to be done. Injudicious feeding or clothing, improper and unnecessary exposure to the sun, or defective ventilation of the dormitory,—these are among the more common causes of such complaints.

Mr. Barras (Rotherham) shall receive an answer next week. His communication was received too late for notice in the present number.

Mr. James B. Smith, (Lofthouse.)—We do not see how a chemist could legally dispose of such a quantity of a poisonous drug to an individual under the circumstances detailed. Our correspondent should refer to the Act for regulating the sale of poisons.

Dr. Clouston (Garlands, (Carlisle.)—Many thanks. An obituary notice is already in type.

Venator, (EXMOOR.)—The Rev. H. B. Tristram still adheres to his views as to the origin of the grouse disease. Before the Committee of the House of Commons on the Wild Birds Protection Act, he maintained on Thursday, the 12th, that the epidemic is due to the destruction of hawks, especially of the peregrine, which invariably picks off the last and weakest bird of the covey, and presumably kills the infected one. Driving, by destroying the strongest birds, is proving fatal to the breed. The destruction of the sparrow-hawk led to the increase of wood-pigeons, which the sparrow-hawk alone is capable of capturing. Trimming ladies' dresses with plumage he denounces as causing many of our showiest birds during breeding time to be destroyed.

Dr. Latham's lecture shall appear in an early number.

MEDICAL LITERATURE IN THE PROVINCES.

To the Editor of THE LANCET.

SIR,—With reference to your reply to Mr. Geo. M. Pittock in your issue of the 7th instant, perhaps your opinion may be modified when you hear that the principal work in question is a new book, out barely a week when sent for review, now not two months old; and that it *is* of local interest, since it strongly recommends the town as a place of resort for certain invalids; thus the two points you seem to make as indicating bad taste are really pointless. It may be added that a copy of the work was presented to each medical gentleman in the town, and was also sent to yourself.—Yours, &c.,

June, 1873. H.

*** Our correspondent's reply is reasonable, but does not call for any material modification of our view of the general question.—ED. L.

Abcona, (Dublin.)—Sleeping cars will, doubtless, enable many people, patients included, to undertake railway journeys previously contra-indicated. On Sunday last Col. Mann's sleeping-cars, with twelve places in each, ran for the first time between Berlin and Ostend. The extra charge for the use of them during the whole of that journey is only eight francs.

ATHLETIC SPORTS.

THE following extraordinary paragraph is taken from a suburban contemporary:—

"ISLEWORTH PUBLIC READING-ROOM.—Reference to an advertisement in our columns will find promise of a real village holiday, in the fête and sports announced for the 10th of July in the grounds of Redlees, belonging to W. F. Watson, Esq. The Reading-room fêtes of the last year or two have been far more exclusive than popular. This fête should be the one Isleworth holiday of the year, and have the entire sympathy of the village with it. The athletic sports, and the bringing together in rational competition all the youth of our local institutions, *with the pleasures of sexual intercourse in the dance on the green sward* to the strains of our volunteer band, is just what is wanted once a year; and if the committee will only give a liberal and popular tone to the occasion, we prophesy for the eighteenth anniversary festival of the society a success that will stand fair comparison with the best of the past seventeen."

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Humphry, Cambridge; Dr. Forbes Winslow, London; Dr. Habershon, London; Dr. Woodman, London; Mr. Gray, Melbourne; Mr. Atkinson, Newcastle; Dr. Wilks, London; Dr. Sheppard, London; Mr. Lucas, Huntingdon; Dr. Iliff, London; Dr. Black, Glasgow; Mr. Welch, Netley; Mr. Banks, Wakefield; Mr. Holderness, Huntingdon; Mr. Seymour, Nottingham; Mr. Cleaver, Plymouth; Mr. Young, East Greenwich; Mr. Hicks, Eastbourne; Mr. Williams, Canterbury; Mr. Renton, Edinburgh; Mr. Broom, Sheffield; Mr. O'Grady, Dublin; Mr. Hardesty, Galashiels; Mr. Thompson, Worksop; Mr. Thomas, Bristol; Mr. Powell, Denbigh; Dr. Brockmell, Norwood; Dr. Waters, Liverpool; Mr. Craig, Dalkeith; Mr. R. H. Hilliard, Holloway; Mr. Wallis, Bath; Mr. France, Liverpool; Mr. Eady, Harlow; Mr. Stowe, Coleford; Mr. Cheavin, Boston; Mr. R. Dalton, London; Mr. Wilkinson, Sydenham; Mr. Martineau, Edgbaston; Mr. Strickland, Nottingham; Mr. Duke, Dover; Mr. B. Groom, Brighton; Mr. George, Williton; Miss Wilson, London; Mr. Kenneth, Burton; Mr. Buck, Oxford; Mr. Horton, Liverpool; Mr. Corsford, London; Mr. Roberts, Tiverton; Dr. Jessopp, London; Mr. J. Ross, Waterfoot; Mr. Allan, Fort William; Mr. White, London; Mr. Wheeler, Malton; Mr. Pennefather, London; Dr. Waddell, Tombland; Mr. Johnson, Gateshead; Dr. Quinan, Dublin; Mr. Bartlett, London; Dr. Malins, Birmingham; Mr. Minchin, Glynneath; Mr. Beach, Garlinge; Mr. R. Clarke, Southampton; Mr. Wyllie, Cloughton; Mr. Bishop, Salisbury; Mr. Browne, London; Mr. R. Hume, London; Dr. Lindsay, Mickleover; Dr. Ralfe, London; Mr. Humphreys, Pwllheli; Mr. Kemp, Sutton; Mr. Hunt, Belford; Dr. Bright, Cheltenham; Mr. Watt, Hovingham; Mr. Akerman, London; Dr. Wiblin, Southampton; Mr. Hyslop, Church Stretton; Dr. Pearson, Stockton-on-Tees; Mr. Anderson, Coventry; Mr. Manley, Frectown; Mr. Barras, Rotherham; Mr. Bowditch, Berlen, U.S.; Mr. Jessett, Erith; Dr. Leared, London; Mr. R. Broom, Catford Bridge; Mr. Vyse, Ormskirk; Dr. Clouston, Garlands; Mr. Burnet, Stockton; Mr. Kingsley, Derby; Mr. Porter, Ilford; Mr. S. Warton, Waltham; Mr. E. Fenn, Dover; Mr. Benham, Stratford-on-Avon; Mr. B. Danvers, Boston; Mr. Benson, Willenhall; Mr. E. Gilmour, Leeds; Mr. Wilkinson, Dudley; Mr. Watson, Romford; Mr. Alexander, Glasgow; Mr. Fowler, Wakefield; Mr. Wood, Ilkeston; Mr. Jones, Upton; Mr. Halling, Barnes; Dr. Williams, Swinton; Mr. Scrivener, Forton; Mr. R. Hartley, Scarborough; Mr. Morgan, Aberdare; Dr. Grieve, Hampstead; Mr. Kelty, Honiton; Mr. Hartell, Willenhall; Mr. E. W. Jackson, Clifton; Mr. Smith, Lofthouse; F. L. R.; L. M.; Scrutator; Student; The Medical Officers of St. Mary's Hospital Medical School; L.R.C.P.; A Constant Reader, Dublin; H. B.; Simplicitas; W. B.; Radius; &c. &c.

Melbourne Daily Telegraph, Tiverton Gazette, Negro, Cornish Telegraph, Jewish World, Gazette des Eaux, Macclesfield Advertiser, and *Edinburgh Daily Review* have been received.

METEOROLOGICAL READINGS

(*Taken by Stewart's Instruments*).

THE LANCET OFFICE, JUNE 19TH, 1873.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 9 A.M.
June 13	29·63	E.	52	55	97	70	50	...	Fine
„ 14	29·83	W.	53	56	98	68	50	...	Fine
„ 16	29·97	W.	55	58	107	72	53	...	Fine
„ 17	30·01	N.E.	58	62	114	76	52	...	Fine
„ 18	30·04	E.	56	57	105	71	54	0·22	Rain
„ 19	30·16	S.W.	56	57	107	71	54	0·25	Overcast

Medical Diary of the Week.

Monday, June 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, June 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, June 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 3½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, June 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, June 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Dr. Robert Braithwaite, "On the Histology of the Plant Structures."

Saturday, June 28.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.